WHY RISK HELPING? AN INVESTIGATION INTO THE RELATIONSHIP BETWEEN SAFETY AND TWO MOTIVATORS OF NEW EMPLOYEES HELPING BEHAVIOUR

A dissertation submitted in partial fulfilment of the requirements for the Degree of Master in Science in Applied Psychology

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Table of Contents

List of Tables

List of Figures

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Abstract

Objective. The primary objective of this study was to investigate, within the context of new employees' and workplace safety, two motivators of employee' helping related behaviours; job security and need for respect.

Design. Correlational cross-sectional design.

Setting/Participants. New Zealand; high risk work industries. 80 eligible participants were recruited from employees in various organisations and associations, with 22 participants excluded due to 10%, or greater, missing data.

Main Outcome Measures. Organizational Citizenship Behaviours and Safety Risky Helping Behaviours.

Results. The study's objective, and subsequent hypotheses, were empirically tested using correlation analyses in SPSS. These analyses showed that employees tenure was not directly related to either the need for respect motivator ($\alpha = 0.05$), or the job security motivator ($\alpha = 0.05$). The analyses also indicate that both motivators were positively related to employees' Organizational Citizenship Behaviours ($p < 0.05$ level, one-tailed), but not related – be that positively or negatively – to their Safety Risky Helping Behaviours ($p < 0.05$ level, one-tailed).

Conclusions. The results of this study suggest that the two motivators examined are directly related to Organizational Citizenship Behaviours, but not to tenure or to Safety Risky Helping Behaviours. As this study is amongst the first to examine these motivators within this context, these findings suggest that further investigation into these motivators, and indeed to the overall model of employee-employee helping, is needed before further consideration is given to implications or practical applications.

Keywords *New Employee Safety, Helping Behaviours, Motivation.*

1 Introduction

1.1 Overview

This study investigates two potential factors as to why employees in the early stages of their employment are at higher risk for health and safety related accidents. This research focuses, within the context of a high-risk work environment, on why new employees might be engaging in helping behaviours and the associated safety risks. Workplace accidents have continued to occur at high rates globally, as well as in New Zealand (Gunby, 2011), with high costs thus making workplace accidents of crucial research significance. This study hopes to address these costs by identifying the motivators of such accidents to better tailor safety risk management processes. Section 1.2 presents a summary of New Zealand's workplace health and safety landscape, as well as highlighting several global and national accident statistics.

Significant workplace accident causation factors are then examined in Section 1.3. Followed in Section 1.3.1 by a more in-depth examination of the relationship between accident causation factors and those individuals considered to be new employees, who are overrepresented in workplace accident statistics. One explanation for this disparate resultmight be helping organizational citizenship behaviours, which in certain risky job contexts, increase the likelihood of accidents, especially for new employees (see Section 1.3.2). Potential motivators of new employees' engagement in helping behaviours are then discussed in Section 1.3.3.

This is then followed by a summary of the present investigation in Section 1.4. Then the two motivator constructs investigated in this dissertation are discussed: 'need for job security' and 'need for respect' (see Section 1.4.1 and 1.4.2 respectively).

1.2 Health and Safety

On the 19th of November 2010, a methane explosion occurred at the Pike River coal mine which resulted in the deaths of 29 men, this tragedy is one of New Zealand's gravest cases of workplace health and safety failure (Gunby, 2011; Cheuh, 2015). Investigation of the incident led to 25 initial charges of alleged health and safety failure being laid against three parties, with two of these parties eventually found to be guilty of charges (WorkSafe New Zealand, 2011; Macfie, 2013). This incident also led to the New Zealand Government initiating a Royal Commission and an Independent Taskforce. Both reports (Royal Commission on the Pike River Coal Mine Tragedy, 2012; Independent Taskforce on Workplace Health and Safety, 2013) suggested that there is a need for change, at a national level, in how New Zealand generally responds to workplace health and safety. The reports' recommendations were largely accepted by the New Zealand Government, who has since committed to reducing serious injuries and fatalities in the workplace by at least 25 percent by 2020 (Ministry of Business, Innovation and Employment, 2013). The recommendations instituted include, but are not limited to the introduction of more effective legislation (resulting in the Health and Safety at Work Act, 2015); the establishment of a health and safety association of New Zealand (resulting in the HASANZ, n.d.); and the establishment of a better regulator (resulting in the establishment of WorkSafe New Zealand, 2017).

Changes and interest in workplace health and safety are not isolated to New Zealand. Globally, there has been a noted interest in workplace health and safety over the last century, with an upsurge of concern in recent decades – from both countries and organizations. Especially as workplace accidents continue to occur at high rates: with a global estimate that everyday 6,300 people suffer fatalities, and 860,000 people are injured (requiring an extended absence from work), because of a work-related accidents or diseases (International Labour Organisation, 2014). In New Zealand workplace health and safety statistics have showed a very slight gradual, decrease over the years (WorkSafe New Zealand, 2015a). However, in

the last decade they remain at concerning levels with the overall workplace fatality rate, per 100,000 workers, being twice that of Australia's and two-thirds higher than that of the United States (Gunby, 2011). For example, in 2015, it is estimated that there were 43 worker fatalities and 3384 seriously injured workers due to workplace-related incidents (WorkSafe New Zealand, 2015b; WorkSafe New Zealand, 2015c).

These statistics are likely to be an underestimate of reality, as they fail to include less serious workplace-related injuries and the consequences of workplace-related diseases. The statistics also do not account for repercussions beyond the worker's direct physical wellbeing, as they fail to account for any emotional and mental repercussions. In addition, these statistics fail – for the most part – in considering possible ripple-repercussions. For example, the repercussions for the worker's family (Department of Labour, 2002) – emotionally, mentally and financially – and organization (Department of Labour, 2002; Head & Harcourt, 1997) – directly (e.g., insurance costs, and organizational fines) and indirectly (e.g., loss of business due to bad public relations, and lost productivity). As well as the repercussions for the greater community (Department of Labour, 2002; Head & Harcourt, 1997) – medically (e.g., disputes over diagnoses, stretched system, and increased usage), socially (e.g., lack of understanding, and blame), and economically (e.g., enforcement, investigation, social welfare benefits, payment of compensation/rehabilitation, lost taxation revenue, administration, education and prevention programmes).

The Pike River tragedy significantly increased interest in workplace health and safety in New Zealand. Statistics show that while Pike River was not an isolated incident, nationally or globally, it was a prompt for the necessary re-evaluation of workplace health and safety systems within New Zealand. Regardless of national change, it is clear, that the present state of workplace injuries and diseases, whether they be temporary or permanent, is not affordable

for anyone in New Zealand. Likewise, it is obvious that despite current efforts poor workplace health and safety performance has continued throughout New Zealand.

1.3 Accident Causation

It is well established that the repercussions of workplace health and safety-related incidents are incredibly significant, thus, to best focus workplace safety interventions and management it is crucial to critically examine the casual factors of accidents and incidents. The body of knowledge on workplace health and safety incidents spans a wide number of disciplines and is in totality both vast and diverse, though somewhat disjointed (see Khanzode, Maiti, & Ray, 2012 for a review). Over the last century researchers have used the knowledge to propose, and investigate, many accident causation theories, with the conclusion of these theories as follows: that workplace accidents occur because of a hazard being present in the workplace, with a person exposed to said hazard during their work, and that this exposure, in combination with any number of interrelating casual factors, results in said accident. Khanzode et al.'s (2012) review of workplace accident causal factors suggests that such factors can be categorised into three main themes: (1) job-related factors, (2) organizational-related factors, and (3) individual-related factors.

This first group of accident causal factors, job-related factors, are those factors which consider the characteristics of both the related-job and its surrounding work environment. Accident causal factors of this type are important as they enable the nature of system-person interactions relevant to an accident to be determined. Many researchers (e.g., Cioni & Savioli, 2016; Ferguson, McNally, & Booth, 1985; Frank, 2000; Khanzode, Maiti, & Ray, 2011; Leigh, Mulder, Want, Farnsworth, & Morgan, 1990; Levin, Oler, & Whiteside, 1985; Maiti, Chatterjee, & Bangdiwala, 2004; Paul & Maiti, 2005) have investigated accident causal factors that fall within this group, with significant factors including: occupation, professional

position, risk of exposure to physical hazards (e.g., chemicals, noise, and temperature), risk of exposure to psychological hazards (e.g., excessive workload, bullying and burnout), work location, work duration, shift of working, length of shift experience, and other job-related factors (e.g., job dissatisfaction, work performance, and job stress).

The second group of factors, organizational-related factors, consider factors that are universal to the organization involved in an accident. This group of factors began to come to the attention of researchers in the early 1970s, with the shift in accident research away from viewing accidents as a cataclysmic event, and towards perceiving them as complex phenomenon influenced by a series of interacting factors (Körvers, 2004). Significant organization-related factors include; co-worker, supervisory and management support (Gillen, Baltz, Gassel, Kirsch, & Vaccaro, 2002); perceptions of priority to performance over safety (Mullen, 2004); perceptions of risks and hazards (Mullen, 2004; Seo, 2005); safety attitudes (Mullen, 2004); working group (Guastello & Guastello, 1987); safety climate (see Zohar, 2010 for a review); turnover (Shaw, Gupta, & Delery, 2005); and human resources management practices (Christian, Bradley, Wallace, & Burke, 2009; Vredenburgh, 2002).

The last group of accident causal factors, and the one that is most relevant to this dissertation, are individual-related factors. Individual-related factors were most focused on during early accident causation research, where people were held as primarily responsible for accidents, however, this type of factor continues to remain important in accident causation research (Khanzode et al., 2012). Research into this group of causal factors has found the following personal characteristics to be significant; age (Khanzode et al., 2012; Salminen, 2004); work experience (Leigh et al., 1990; Shackleton, 2016); education (Leigh et al., 1990); mental ability (Ferguson, McNally, & Booth, 1984); unhealthy living habits, such as smoking, obesity, regular alcohol consumption, and poor sleeping habits (Kouvonen et al., 2013; Kunar, Bhattacherjee, & Chau, 2008; Nakata et al., 2005); absenteeism (Verhaegen,

Strubbe, Vonck, & Van Den Abeele, 1985); some psychological traits, such as extraversion, negative affectivity, and risk-taking (Christian et al., 2009; Maiti et al., 2004; Paul & Maiti, 2005), and lastly tenure (Burt, 2015; Cioni & Savioli, 2016).

The accident causation research summarised above highlights a wide range of factors with varying levels of significant causal relationships across three distinct themes. Curiously, several factors, especially individual- and organizational-related factors, appear to cluster around a sub-population of the workforce: that of new employees. As these factors are individually significant to accident causation, this suggests that this sub-population deserves special consideration in accident causation research, and may be worthy of consideration as a causation factor in of itself.

1.3.1 New Employees

New employees are those individuals in an organization's workforce who have recently started in a job, irrespective of that individual's prior employment history or age (Burt, 2015; Van Zelst, 1954). More than 100 years of research has found evidence suggesting that these employees are more likely to be involved in an accident – either to themselves or others – than any other employees in the workforce (Burt, 2015). Salminen's (2004) review suggests that these findings are a global phenomenon and occur, mainly, irrespective of industry and gender. Furthermore, Burt (2015) suggests that considerable global demands (e.g., the changing nature of work, and retirement of the 'baby boomers') will likely lead to increasing numbers of new employees in organizations, thus further increasing these disproportionate safety statistics. Returning to consider the accident causation literature, Burt (2015) suggests there are three key research literatures that address the relationship between accident causation, and new employees; research on turnover, which

is an organizational-related factor; and two individual-related factors, research on, age and job tenure.

Research on employee turnover suggests an association with higher accident rates, however, this relationship appears to have been seldom considered outright (Burt, 2015). The most apparent exception to this being a study by Shaw et al. (2005) proposing four relationships between voluntary turnover and organizational performance, with safety performance as a dimension of the latter. These relationships include; a negative linear relationship, an inverted U-shaped relationship, a negative attenuated relationship, and a relationship moderated by human resources management. Shaw et al.'s (2005) findings are not discussed as relating to the relationship between turnover and accident causation. However, Burt (2015) suggests that for all four hypothesised relationships, the potential for substantial turnover – and thus influx of new employees – will likely lead to a negative impact on organizational safety.

Burt (2015) states that a large body of knowledge exists regarding the relationship between age and accident causation, with a primary focus on young employees – and thus likely also new – employees (see also Khanzode et al., 2012 for a review). A comprehensive review of young employees' accidents, undertaken by Salminen (2004), found that young workers (those under 25 years) were at higher risk for involvement in nonfatal accidents, and at less risk for fatal accidents, than older employees. Thus, strongly supporting a relationship between accident causation and age – or at least characteristics associated with age. However, Burt (2015) suggests that when similar studies have controlled for work experience they have found evidence to support that it is their status as new employees which is most relevant to accident causation, rather than their age.

The last significant body of accident causation research that relates to new employees, and the one that is relevant to this dissertation, is job tenure. Research across a variety of

industries (e.g., Bentley, Parker, Ashby, Moore, & Tappin, 2002; Jeong, 1998; McCall & Horwitz, 2005) suggests that a significant relationship exists between accidents and job tenure: a negative linear relationship within a crucial initial period of employment – specifically during the first 12 months. Burt (2015) suggests that during the first stage of the initial employment period (i.e., the first three months) employees may somehow be 'protected', and proposes an additional hypothetical relationship: an inverted U-shaped relationship between job tenure and an organization's rate of accidents (see Figure 1).

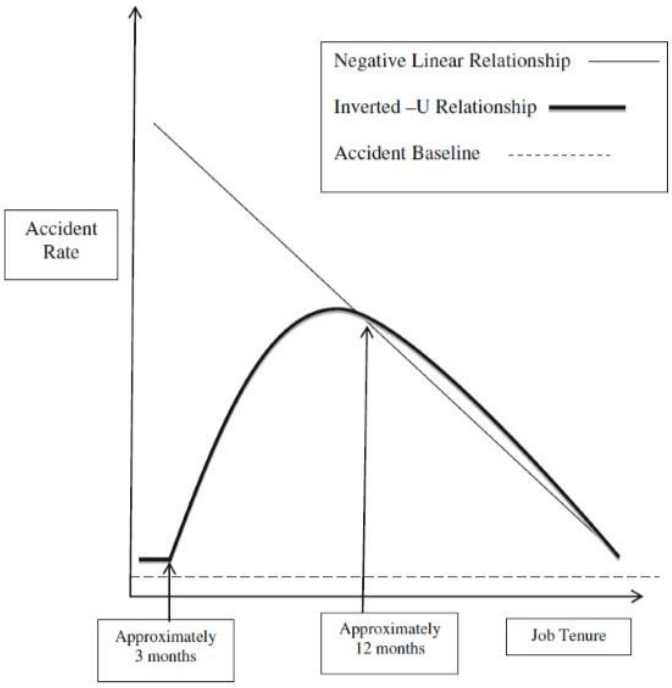

Figure 1. Hypothetical relationships between job tenure and accident rates. Adapted from *New Employee Safety* (pg. 12), by C. D. B. Burt, 2015, Cham, Switzerland: Springer International Publishing. Copyright 2015 by Springer International Publishing.

Evidence suggests that when considering accident causation, it is thus critical to consider the effects of certain individuals, new employees, in the involvement of accidents, especially within their initial period of employment (Burt, 2015). Acknowledging this, however, only highlights the importance of understanding what separates new employees, from those with more job tenure. Burt (2015) suggests that a potential explanation is that new

employees may be more likely to attempt to engage in helping behaviours in the workplace, than more tenured employees. Issues associated with helping behaviours are discussed in the next section.

1.3.2 Helping Behaviours

Workplace helping is generally considered in the literature within the broader context of organizational citizenship behaviour (henceforth OCB). OCBs were defined originally in 1988 as "individual behaviour that is discretionary, not directly or explicitly recognized by the formal reward system, and that in the aggregate promotes the effective functioning of the organization" (Organ, 1988, pg. 4). However, Banks (2012) suggests that, among other issues, this definition no longer fits with the mutable nature of work today. He suggests instead that OCB's be broadly defined as behaviours performed at the discretion of an individual that are not formally prescribed by the organization, but that encourage its efficient and effective functioning.

Somewhat akin to society's encouragement of perceptions of helping and being helped as positive experiences (Burt, 2015), OCB's are also widely praised as a positive organizational practice (see Carpenter, Berry & Houston, 2015 for a recent meta-analytic review). Research suggests that OCBs contribute towards positive organizational functions including, but not limited to: increased effectiveness (Podsakoff, Whiting, Podsakoff & Blume, 2009), increased productivity (Gyekye & Salminen, 2005), decreased costs (Podsakoff et al., 2009), increased customer satisfaction (Bell & Menguc, 2002; Podsakoff et al., 2009), decreased turnover (Podsakoff et al., 2009), and an increased ability to attract and retain effective employees (Podsakoff, MacKenzie, Paine, & Bachrach, 2000). Furthermore, positive acts of helping, and specifically that of positive outcomes due to safety-related

helping are also apparent in the literature (e.g., Naumann & Ehrhart, 2011; Van der Vegt, Bunderson, & Oosterhof, 2006; Didla, Mearns & Flin, 2009; Gyekye & Salminen, 2005)

Research habitually references OCB's as having positive consequences, with research into negative consequences – both intentional and otherwise – largely ignored, barring a few exceptions (e.g., Bolino & Turnley, 2005; Burt, Banks, & Williams, 2014). For, example, in one study Bolino and Turnley (2005) investigated the consequences of OCBs at an individual level and found positive relationships between individual initiative (i.e., an individual component of OCB) and three outcome variables – role overload, job stress, and work-family conflict. Thus, suggesting that engaging in OCB's could be detrimental to employees at an individual level. Furthermore, as organizations today have increasing expectations of their employees to engage in high levels of OCBs (Bolino & Turnley, 2005), it becomes increasingly important to understand in detail the potential consequences, especially those that might be negative, of such behaviours.

Additionally, it is vital to understand how these consequences might relate to workplace safety, that is in jobs with – or jobs performed within environments – with known safety risks, as negative helping-safety consequences are well established. For example, Burt (2015) describes an employee's helping related accident: an employee at a rubbish processing plant, exited a vehicle and moved behind it to guide the driver in reversing, then during motion the employee attempted to jump onto the vehicle to release the unloading lock, and in doing so slipped and was killed (pg. 109). Suggesting, that engagement in helping OCBs in jobs with safety risks, such as that above, further decrease workplace safety and consequently can have

Previously research into the relationship between OCB's and negative safety consequences has been limited, barring a few studies with somewhat conflicting results as to the nature of such a relationship (e.g., Christian et al., 2009; Gyekye & Salminen, 2005). Potentially, this may be due to researchers investigating safety consequences as static, rather

than as a continuum: with helping behaviours having no safety risk at one extreme, and creating an unsafe act or safety violation at the other (Burt, Banks, & Williams, 2014). Additionally, such research neglects to control for the effects of the job context in which the helping-safety relationship exists.

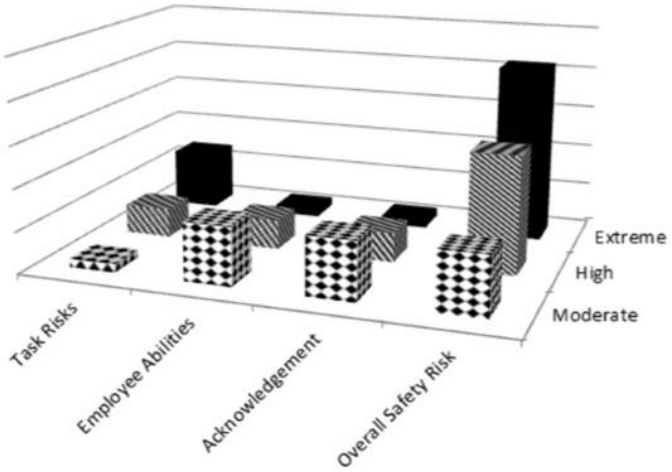

Figure 2. Modelled relationships between helping, and the associated task risks, employee abilities, acknowledgment and the overall safety risk. Adapted from *New Employee Safety* (pg. 113), by C. D. B. Burt, 2015, Cham, Switzerland: Springer International Publishing. Copyright 2015 by Springer International Publishing.

Burt (2015) suggests that in the relationship between helping and safety, the following significant determinants need to be considered: the inherent task risks, the abilities of the helpful employee to provide help, and acknowledgment (i.e., communication) between the helper and the employee being helped. The relationships between these three determinants and the safety risk associated with helping are represented in Figure 2 on a scale between 1 to 7, wherein lower scores equal less helping related risk. Figure 2 shows that there is less safety risk associated with helping when task risk is low, helper ability is high, and acknowledgment is complete. Moderate safety risk when task risk is moderate, helper abilities are moderate, and acknowledgment is incomplete. As well as an extreme safety risk related to helping when task risk is high, helper ability is low, and there is no acknowledgment. In summation, Figure

2, illustrates that as the risks associated with helping increase, so too does the overall level of safety risk for those employees involved in helping.

Burt et al. (2014) investigated, within the job context, a continuum relationship between employee-to-employee helping OCB's and safety risks. They found evidence that employee-to-employee helping OCB's are significantly, and negatively, associated with safety risk for both the helper- and the helped-employee. These results also supported the existence of four mechanisms through which helping may lead to negative safety consequences: the forgetting (e.g., the employee forgot something they had planned to do), the absence (i.e., unexpected; e.g., the employees departure from their tasks led to something unexpected happening), the hazard creation (i.e., unknown; e.g., employee in helping inadvertently created a hazard for other employees), and the time pressure mechanisms (e.g., engaging in helping led to time pressure for the employee to complete their tasks).

Furthermore, Burt et al. (2014) hypothesised that as humans learn from mistakes (e.g., Tjosvold, Yu, & Hui, 2004), new employees (i.e. those with less tenure) would show significantly greater helping safety risk than other employees – as they would not yet have learned that helping in some circumstances can be risky, and as such, refrain from doing so. Two studies, across a wide range of industries, both found evidence to support a small, but significant, negative relationship between tenure and helping safety risk (Burt et al., 2014). Thus, supporting their hypothesis that new employees are more likely, than other employees, to engage in risky helping behaviours. However, these findings fail to address *why* new employees are disproportional represented in these results – as well as in accident statistics.

Burt (2015) suggests that one explanation for this difference is that new employees may engage in helping behaviours due to unrealistic safety expectations or perceptions, and that as tenure increases employees learn more about safety risks thus decreasing their likelihood to perform such behaviours. Alternatively, Burt (2015) suggests that new employees may have

both realistic expectations and perceptions, but choose to engage in helping behaviours with potential negative safety consequences anyway (i.e., prosocial rule violation; Otsuka, Misawa, Noguchi, & Yamaguchi, 2010). With new employees' prosocial rule violation occurring due to a number of potential motivators, the effects of which may then decrease as tenure increases (Burt, 2015). Some of these motivators are discussed in the next section.

1.3.3 Motivation for Helping

The construct of motivation originates from the ancient Greek philosophy of hedonism, and is today widely used to explain behaviours (Aquinas, 2006). Aquinas suggests that the construct is commonly considered as an explanation of the processes that initiate, direct and maintain behaviours, to satisfy an unsatisfied need and/or to achieve a goal. With the amount of persistence towards these actions directed by the intensity of an individual's motivation – which is in turn driven by the amount, and strength, of the motivators present – as well as the context (e.g., abilities, environments) in which it they occur (Aquinas, 2006).

Consequently, when considering motivation, the importance of context, in this case the workplace, is apparent. Work motivation is thus defined as "the […] forces that originate both within as well as beyond an individual's being, to initiate work-related behaviour, and to determine its form, direction, intensity and duration" (Pinder, 2008, pg. 11). With this definition used henceforth when referring to the term work motivation. Many theories attempt to describe work motivation, with most theories divided, broadly, into the following categories (see Jex & Britt, 2008 for a review): job-based, cognitive process, behavioural and need-based.

Nevertheless, of the numerous work motivation theories developed, and examined by researchers – or applied by practitioners – none tends to entirely explain motivation wholly, nor apply to all contexts. Still, one concept that is frequently observed across a range of work

motivation theories is that each employee's motivation is concerned with two distinct types of work-related motivators (Aquinas, 2006); extrinsic motivators, that is motivators external to the employee which can be either positive (e.g., a promotion) or negative (e.g., removal of pay); and intrinsic motivators, that is motivators internal to the employee (e.g., drive to excel, prosocial values). Previous research, into the relationship between work-related motivators and OCB's, research suggests that pro-social behaviours, such as helping OCB's, arise as a conscious response to satisfy one, or more work-related motivators not explicitly recognized by the formal reward system (Organ, 1988; Penner, Midili, & Kegelmeyer, 1997; Rioux & Penner, 2001). Work-related motivators of OCB's, such as helping, are known to include: leadership, procedural justice, organizational support, structural distance, working conditions, and work tasks (see Abuiyada & Chou, 2012 for a review).

In the context of safety, research into this relationship is limited (e.g., Didla et al., 2009; Gyekye & Salminen, 2005), though a few motivators have been identified (e.g., working relationships, stress, and a need for self-preservation). Likewise, in the context of new employees (i.e., job tenure) limited research is available (e.g., Huang, McDowell & Vargas, 2015), however this research suggests rather than distinctly different motivators job tenure acts as a mediator to the relationship between work-related motivators and OCB. Still, even less literature (e.g., Burt, 2015) exists investigating the relationship between work-related motivators and helping OCBs, within the context of both safety and the effects of new employees.

1.4 Present Study

The discussion above illustrates a need for further research on the motivators of employee's engagement in helping behaviours within the context of safety, and why new employees are more likely to engage in such behaviours. The potential motivators that will be

explored in this study are two of the motivators hypothesised by Burt (2015): need for respect, and need for job security.

1.4.1 Need for Job Security

Humanity's need for security was first conceptualised as a significant motivating factor for human behaviour by Maslow in 1943. Maslow (1943) suggested, that so long as physiological needs (e.g., air, water, food) were relatively fulfilled, then safety needs (e.g., security, structure, safety, stability) would likely emerge as the dominant motivator of human behaviour. For example, within the context of the modern work environment; workplace behaviours might be motivated by an employee's need for fair work practices, safe working conditions, fair wages, benefits, and job security. This last motivator of workplace behaviours, and that of relevance to Burt's hypotheses (Burt, 2015), is an employee's need for job security.

Job security is the continuum of an employee's confidence in the continuity and stability of their position and employment in their current organization (Shoss, 2017); wherein high job security indicates that the employee has little chance, currently, of becoming unemployed, and low job security, the opposite. This continuum can be further split into considering job security as both an objective state and a subjective experience (Greenhaus & Callanan, 2006). With Greenhaus and Callanan (2006) suggesting that the former is of greater import when considering forecasting for a position, and the latter of greater import when considering the outcomes of job security. Thus, as the outcome variables of interest to this study are behavioural, the focus when considering need for job security shall henceforth be on its subjective experience.

The antecedents of job security are relatively un-researched, though still numerous (see Greenhaus & Callanan, 2006 for a review). As a *subjective* experience, it is impossible to

disregard the relationship between job security and individual characteristics, including but not limited to: personality traits (e.g., negative affectivity, locus of control, self-esteem), demographic factors (e.g., gender, minority status, age) and experiential factors (e.g., role ambiguity, emotional exhaustion). However, Klandermans, Hesselink and Van Vuuren (2010) suggest that although subjective, subjective experiences, such as job security, – often – arise from *objective* environmental conditions. Thus, of equal import is to consider those antecedents external to the individual.

Shoss (2017) suggests that the external, or environmental, antecedents of job [in]security can be summarised into four categories; macro-environmental characteristics (e.g., technological changes, unemployment rate, and globalization); organizational characteristics (e.g., sector, union presence, and organizational performance); interpersonal characteristics (e.g., bullying, and social support); and positional characteristics (e.g., industry, contract type, and employment status). With the first and last of these categories having the most significant relationships to job security (De Witte, 2005), potentially because antecedents in these categories are more objective and thus hold greater weight, or because they are comparatively easier to observe and thus more easily lead to an accurate subjective experience. Regardless, it supports the import of environmental antecedents of job security.

Within the environment of New Zealand's labour market, it is known that due to environmental characteristics 25-50% of the working population are vulnerable to job insecurity (New Zealand Council of Trade Unions, Te Kauae Kaimahi, 2013). However, despite this, empirical research – and indeed data gathering – on job security in the context of New Zealand's current labour market remains negligible, let alone the consideration of antecedents (e.g., Boxall, Macky, & Rasmussen, 2003; Pacheco et al., 2016). Still, national research has been identified several significant antecedents of job security; positional antecedents, such as contract type; macro-environmental characteristics, such as legislation of

90-day trial periods (Employment Relations Act, 2000); and individual characteristics, such as tenure.

The literature on job security makes it clear that there are many antecedents of job security, though of varying levels of significance, with emphasis placed on the importance of environmental antecedents. Within New Zealand, minimal research has been conducted, but those antecedents of job security identified appear to cluster around tenure (Statistics New Zealand, 2014). Which the literature (e.g., Lübke & Erlinghagen, 2014; Probst, 2002) identifies as having a significant positive relationship with job security. Suggesting that the longer an employee works in a job, the more that individual perceives themselves as having job security. Thus, as tenure increase's employees' need for job security is meet, and thus this motivator will decrease. Accordingly, hypothesis 1 was formed;

Hypothesis 1: Tenure will be negatively correlated with job security promoting behaviours.

Although useful to consider predictors of job security, of equal use is to consider the reactions (i.e., the mechanisms and consequences) thereof. The consequences of job [in]security are numerous, and widely examined in the literature (e.g., De Witte, 2005; Shoss, 2017; Sverke, Hellgren, & Näswall, 2002), however the exact mechanism(s) through which job security affects these consequences is still debated over (see Shoss, 2017 for a review). One proposed mechanism is that of job [in]security acting as a *stressor* (Shoss, 2017); wherein employees become motivated to not engage in, or to lessen efforts in, work related behaviours due to reduced psychological resources due to low job security. While this arguably might result in the disengagement in any number of employee behaviours, the one of interest to this study is the withdrawal of engagement in behaviours not related towards meeting production demands. Specifically, that low job security will prompt withdrawal of engagement in employee-to-employee helping.

Still, while many studies have investigated the relationship between OCB and job security (e.g., Feather & Rauter, 2004; Stynen, Forrier, Sels, & De Witte, 2015), only a few studies provide empirical evidence from this perspective of job insecurity as a stressor. For, example, Staufenbiel and König (2010) who tested a model of job insecurity and found evidence supporting a non-significant negative relationship between job insecurity and OCB. Thus, employees with low job security are likely less motivated by it, and are thus likely to disengage in helping behaviours that are not directly related to the organizational performance to better preserve their own resources. Consequently, hypothesis 2 was developed;

Hypothesis 2: Job security will be positively correlated with helping Organizational Citizenship Behaviours.

Conversely, Shoss (2017) suggests that low job security can also act through the mechanism of job preservation; wherein low job security motivates employees to engage in, or put more effort into, behaviours that they believe will demonstrate their value as an employee, and thus allow them to retain their job. Again, arguably job preservation might result in employees engaging in any number of employee behaviours – be they adaptive, such as work intensification, or maladaptive, such as facades of conformity (Shoss, 2017). However, the one of interest to this study is that of engagement, or intensified effort, in safety risky helping OCB's. While employees' may believe that such behaviours demonstrate their value as an employee, Burt (2015) suggests that they are a maladaptive type of behaviour, which in risky work environments may result in negative safety-related incidents. Job security, to our knowledge, has not yet been investigated by researchers in the context of these types of behaviours. However, research on the relationship between job security and OCBs (e.g., Staufenbiel & König, 2010; Stynen et al., 2015) supports a negative relationship. Hence, hypothesis 3 was formed;

Hypothesis 3: Job security will be negatively correlated with risky helping behaviours.

1.4.2 Need for Respect

Humanity's need for respect was conceptualised as a significant motivating factor for human behaviour by Maslow in 1943. In which Maslow (1943) stated that the fourth level of needs to emerge as dominant, after relative fulfilment of previous levels (i.e., physiological needs, safety needs, and social needs), was that of esteem needs (i.e., need for respect). Further, he considered that this could be split into need for respect from self (i.e., self-respect; e.g., confidence, achievement, and independence) and need for respect from others (e.g., prestige, attention, and appreciation), with the former likely taking precedence in motivation order over the latter. Again, though not envisaged within the modern work environment, the reflection of how these needs might be manifested is straightforward. For example, workplace behaviours might be motivated by an employee's need for achievement (e.g., completion of an assignment), prestige (e.g., job title), attention (e.g., feedback, and job enrichment), and recognition (e.g., bonuses). Based on Burt's hypotheses (Burt, 2015) need for respect from others is the type of respect of interest, and henceforth this is the conceptualisation of *need for respect* utilized.

Various definitions of respect have been utilized within the literature (see Rogers & Ashforth, 2014/2017 for a review). For the purposes of this study, the definition utilized is as following; respect is the intragroup judgment perceived by an individual (i.e., employee) that is concerned with the value accorded to said individual by one or more other individuals (i.e., their co-workers; Bladder & Tyler, 2009; Rogers & Ashforth, 2014/2017). Thus, a high need for respect indicates that an employee strongly wants to perceive their co-workers as having judged them to be of value, and a low need for respect indicates the opposite. With this

respect based on the following attributes: work abilities, job commitment, organizational commitment, work achievements, and work related cooperation (Shackleton, 2016).

Antecedents of perceptions of respect [from others] has not obtained much in the way of research, however, antecedents suggested in the literature include: group prestige (Rogers & Ashforth, 2014/2017), perceived group acceptance (Simon, 2007), climate (Rogers & Ashforth, 2014/2017), success (Prestwich & Lalljee, 2009), behavioural indicators of respect (Rogers & Ashforth, 2014/2017), and tenure (Ng, 2016). This last antecedent, and that of relevance to Burt's hypotheses (Burt, 2015), is job tenure. Research (e.g., Ng, 2016) on the relationship between job tenure and need for respect suggests a positive relationship, suggesting that employees with longer tenure have more to be respected over, and thus feel an increasing need for respect in their organization. Consequently, hypothesis 4 was developed;

Hypothesis 4: Tenure will be positively correlated with need for respect

A wide range of studies have shown that respect is related to many self-related outcomes (e.g., psychological safety, commitment, and organizational identification), which are in turn related to various secondary benefits, such as collaboration, employee health and OCB's (see Rogers & Ashforth, 2014/2017 for a review). This last secondary benefit, is the outcome variable of interest to this study. Several studies (e.g., Blader & Tyler, 2009; Bowling Eschleman, Wang, Kirkendall, & Alarcon, 2010) have investigated, and found empirical evidence to support, the relationship between respect from others (i.e., co-workers or organization) and extra-role behaviours, such as helping OCB's. Rogers, and Ashforth (2014/2017) also suggest that as respect fulfils employees' need for respect, it likely shares the same relationships with regards to both primary and secondary outcomes. Thus, suggesting need for respect will motivate employees to engage in, or intensify efforts

towards, helping OCB's to gain respect from their co-workers. Hence, hypothesis 5 was formed;

Hypothesis 5: Need for respect will be positively correlated with helping Organizational Citizenship Behaviours.

Need for respect has not yet been investigated by researchers in the context of safety, let alone investigated as to whether it motivates engagement/disengagement in safety related behaviours, such as helping OCB's. However, employees have been shown to that engagement in helping behaviours occurs regardless of negative consequences (see Section 1.3.2). Thus, as employees with greater need for respect, will be motivated to engage in risky helping OCB's to gain respect from their co-workers. Accordingly, hypothesis 6 was formed;

Hypothesis 6: Need for respect will be positively correlated with risky helping behaviours.

2 Method

2.1 Design

This study utilised a correlational cross-sectional research design, to investigate the Hypotheses proposed in Section's 1.4.1 and 1.4.2. Specifically, this study measured helping behaviours, both safety-related and OCB's, as the dependent variable. As well as utilizing tenure, perceived job risk, need for respect and need for job security, as the independent variables. The design utilized in this study was approved of by the University of Canterbury Human Ethics Committee.

2.2 Procedure

This study utilized archival data accessed from an earlier research project (Shackleton, 2016), which was part of a larger effort to accumulate data to investigate the motivators of

occupational employee safety, but not yet analysed within the context of the variables, and relationships thereof, of interest to this study (i.e., the data was utilized for secondary data analyses). This data was collected from many individuals in various New Zealand organizations and occupational safety associations[1]. These individuals were contacted via phone, or email, at which point a brief outline of the study was given. A more detailed explanation was then provided to those expressing interest – either in person, or via email.

Individual participants were then recruited from within these organizations, and associations, in one of two ways: indirectly through a facilitating organizational employee, or through use of advertisements placed in relevant locations – both virtual and physical. During recruitment participants were given the contact details of the researcher, as well as details of the study; including its prerequisites (i.e., the sample frame[2]). Each participant, was also informed of the incentive being provided to participate; the opportunity to go into the draw to win a brand-new TV. Upon agreement to participate, questionnaires were distributed to participants in one of two ways; by a member of the organization's management team; or online using Qualtrics which could be accessed via either a provided link or QR code.

In those instances, when the questionnaire was distributed by a member of the organization's management team, each participant was provided with an envelope alongside their questionnaire and other forms. They were asked to use this envelope upon completion of the questionnaire, to seal their questionnaire separately from their consent and prize-draw forms to ensure anonymity. These envelopes were then collected, alongside completed questionnaires by the researcher. In those instances, when participants utilized the online Qualtrics questionnaire they were, upon its completion, asked if they wanted to enter the

[1] The *survey population* (Dillman, 2007) for this study is all employees working with New Zealand's workforce.
[2] The *sample frame* (Dillman, 2007) for this study is those individuals employed in work in a team within a high-risk work industry.

draw to win their incentive, with mention given to the relevant draw details, and that this response was not linked to questionnaire responses. This display, allowed participants to either click either ‘Yes’ or ‘No’, with the former indicating that they wished to enter the draw, and the latter the opposite. Participants entering the draw were then required to enter their name and email address, before the screen switched to a display thanking them for participating and informing them of the completion of the study. Those not entering the draw were instead immediately transferred to this last display.

2.3 Participants

Participants were 36 males – with an average age of 41.9, an age range of 24 to 64 years, and a standard deviation of 10.62 years – and 21 females – with an average age of 36.7, an age range of 22 to 54 years, and a standard deviation of 9.39 years. The average length of tenure in the participant’s current job was 8.4 months, with a minimum tenure of 1 month and a maximum tenure of 60 months (5 years). Participants had a mean number of 43 co-workers (*SD* = 199; both to 0 d.p.). All participants were employed in jobs within high-risk industries including, but not limited to: construction, food processing, mining, forestry, and agriculture.

2.4 Measures

The content of both the online and paper versions of the questionnaire distributed was identical. The first page provided information about confidentiality, anonymity, informed consent, ethics approval, and how to obtain project results (see Shackleton, 2016 Appendices C, and D). While the second page provided instructions for completing the questionnaire. The questionnaire utilized contained 16 sections, with the order of sections counterbalanced, prior to distribution, to diminish common method variance (Podsakoff, MacKenzie, & Podsakoff,

2012). Except for the demographic- and the experimental-sections which were first and last respectively, for all participants to not disrupt participants' logical progression. Only those sections relevant to this dissertation, are described below in more detail.

The demographic section utilized included questions regarding age, gender, *job applicant category*, *the 90-day trial period*, current job tenure, number of co-workers, *total employment tenure, total number of jobs held, job safety* and *previous work experience*. With responses to questions shown in italics not included in data analysed in this study.

Helping Behaviours

Engagement in helping behaviours, and the associated safety risks, was measured using two scales. The first measure, an adaptation of the Task-Focused construct of the Interpersonal Citizenship Behaviour scale (Settoon & Mossholder, 2002), assessed the degree to which participants engage in task-focused helping behaviours at work. These 6-items each rated on a 5-point Likert scale, ranging from 1 (*strongly disagree*) to 5 (*strongly agree*), wherein higher scores indicated that participants engaged in high levels of helping behaviours. An example item from this scale is '*Go out of my way to help co-workers with work-related problems*'. Task-Focused Interpersonal Citizenship Behavior, has been shown to be distinct from Person-Focused Interpersonal Citizenship Behavior, and is also correlated with relationship quality and context antecedents (Settoon & Mossholder, 2002). The Task-Focused construct of the Interpersonal Citizenship Behavior scale has a composite reliability of .95 (Settoon & Mossholder, 2002), with this study finding internal consistency reliability to be .83.

The second measure, an adaptation of the Helping Safety Risk scale (Burt, Banks, & Williams, 2014), assessed the degree to which participants engage in *risky* helping behaviours at work). This adapted scale was an 8-item measure consisting of two single-item questions,

and two subscales (detailed below) measuring the other mechanisms through which helping may lead to an increased safety risk. One single-item question, assessed the 'time-pressure' mechanism: '*At work I have had to rush to complete my tasks because of spending time helping another employee*'. The other single-item question, assessed the 'forgetting' mechanism: '*At work I have forgotten to do something because of spending time helping another employee*'. Participants responded to each item rated on a 6-point Likert scale, ranging from 1 (*never*) to 6 (*nearly all the time*), wherein higher scores indicated increased safety risk due to helping behaviours.

The subscale assessing the 'absence' mechanism contained three-items. These items were: '*While helping another employee something unexpected has happened with my job*', '*I ask if it is ok before helping another employee*', and '*At work I have done something to help another employee which they were not expecting*'. The coefficient alpha for this subscale was insufficient at .28.

Lastly, the subscale assessing the 'hazard creation' mechanism also contained three-items. These items were: '*At work I have done something to help another employee which I did not immediately tell them about*', '*At work I have attempted to help another employee and realised I didn't have the required knowledge, skills or abilities*', and '*Doing what I thought would be helpful for another employee turned out to be a safety risk*'. The coefficient alpha for this subscale was also insufficient at .63.

As this measure, has been adapted for the purposes of this study no psychometric data on this instrument specifically is available, however, general evidence supports its convergent and discriminate validity (Burt, Banks, & Williams, 2014), as well as sufficient internal reliability: with Cronbach's alphas between .73–.87. This study found overall internal consistency reliability for this measure to be .81.

Job Security

Participants job security, and job security promoting behaviours, was measured using the Need for Job Security scale (Burt, 2016b, unpublished), which assesses the degree to which each participant is motivated to obtain job security. This scale is a 4-item measure, with each item rated on a 5-point Likert scale, ranging from 1 (*strongly disagree*) to 5 (*strongly agree*), wherein higher scores indicated that participants were strongly motivated by job security. An example of an item is '*I do everything I can to ensure that I keep this job*'. No psychometric data on this instrument is available. Internal consistency reliability for this study was calculated using Cronbach's alpha at .62.

Need for Respect

Participants need for respect was measured using the Need for Respect scale (Burt, 2016c, unpublished), which assesses the degree to which each participant is motivated to obtain respect from their co-workers, or teammates, about their work. This scale is a five-item measure, which includes three-items developed independently by Burt (2016c, unpublished), and two-items adapted by Burt (2016c, unpublished) from Ellemers, Sleebos, Stam and de Gilder's (2013) perceived respect construct. Each item is rated on a 5-point Likert scale, ranging from 1 (*strongly disagree*) to 5 (*strongly agree*), wherein higher scores indicated that participants were strongly motivated to obtain work-based respect from their co-workers. An example of an item is '*I need my co-workers to respect me for my work abilities*'. No psychometric data on this instrument is available, however, internal consistency reliability for this study was excellent (Cronbach's alpha of .92).

3 Results

3.1 Data Preparation

Data from Qualtrics was downloaded into a SPSS Statistics database, with responses from paper questionnaires manually entered in to the same database. 22 cases which had more than 10 percent missing data were then removed from the database. Cases with less missing data were kept, and missing data was not replaced, which resulted in some slight variance in the number of participants (*N*) across the analyses performed (see Table 3). During data analyses, the missing data was addressed using listwise deletion. Scores for reverse coded items were then transformed to correspond with the orientation of the items respective scale. Following this, the scores for the items in each scale were summed (utilising the reoriented scores for the reverse coded items, in place of the original score), and then divided by the total number of items in the scale, to provide a value for each scale.

3.2 Diagnostic Analyses

To determine the best method of correlation testing to utilize for this study, the following data analyses were conducted to investigate correlation test assumptions; first the type of variables were examined; second, data was investigated for the presence of outliers; third, data was examined for normality; and lastly, data was investigated for linearity. All the items in this study were measured at the interval (e.g., tenure) or ordinal level (e.g., Likert scales). Thus, suggesting that Pearson's product-moment correlations and Goodman and Kruskal's gamma not be used to test they Hypotheses. The identification of several statistical outliers (see Appendix A), which were retained due to determination that their presence was due to inherent data variability, also supports the former decision.

As this study included less than 2000 cases, normality was examined using Shapiro Wilks W Test ($\alpha = 0.05$). The results from these tests are illustrated in Table 1. Normality can

only be assumed for one item examined; the scale value for Risky OCB, and of those items assumed to have distributions departing from normal for most this is slight and can be ignored (Chok, 2008). However, the following items have severely non- normal data (i.e., has significant skew and/or kurtosis); tenure, JS1, JS3, OCB2, HO2, HO3, HO4, HO6 and HO8. Thus, again supporting that Pearson's correlations not be utilized for this study.

Table 1

Descriptive Statistics and Normality Tests for Study Variables and Scale Values.

		N	Mean	*SD*	Range	Skewness	Kurtosis	Shapiro-Wilk	
						SE = .32	*SE* = .63	Statistic	*p*
Tenure		*58*	8.59	*11.36*	59	3.57 *	14.35 *	.57	.000 †
	TMC1	*56*	3.71	*.96*	3	-.43	-.65	.86	.000 †
	TMC2	*56*	3.76	*.92*	3	-.38	-.58	.87	.000 †
Need	TMC3	*57*	3.58	*.94*	3	-.04	-.83	.88	.000 †
for	TMC4	*57*	3.51	*.94*	3	-.10	-.83	.88	.000 †
Respect	TMC5	*57*	3.76	*.88*	3	-.35	-.47	.87	.000 †
	Scale Value	*57*	3.67	*.80*	3.00	-.31	-.42	.95	.026 †
	JS1	*57*	4.11	*.79*	3	-.91 *	1.04	.79	.000 †
	JS2	*57*	3.71	*1.12*	4	-.55	-.42	.88	.000 †
Job	JS3	*57*	3.87	*.94*	4	-.83 *	.63	.85	.000 †
Security	JS4	*57*	3.87	*.88*	3	-.41	-.47	.86	.000 †
	Scale Value	*57*	3.89	*.65*	3.25	-.20	1.09	.93	.005 †
	OCB1	*58*	4.16	*.66*	3	-.59	1.07	.78	.000 †
	OCB2	*58*	3.80	*.85*	4	-.92 *	1.48 *	.83	.000 †
	OCB3	*58*	3.93	*.86*	3	-.59	-.07	.84	.000 †
OCB	OCB4	*58*	4.02	*.73*	3	-.32	-.20	.83	.000 †
	OCB5	*58*	3.89	*.74*	3	-.40	.21	.83	.000 †
	OCB6	*58*	3.91	*.82*	3	-.45	-.17	.85	.000 †

(Continued.)

Table 1 *(Continued.)*

		N	Mean	*SD*	Range	Skewness *SE* = .32	Kurtosis *SE* = .63	Shapiro-Wilk	
								Statistic	*p*
OCB	Scale Value	*58*	3.95	*.57*	2.50	35	.09	.93	.003 †
	HO1	*56*	3.47	*1.17*	5	.00	-.94	.91	.001 †
	HO2	*56*	2.91	*1.19*	5	.66 *	-.35	.88	.000 †
	HO3	*56*	2.25	*1.34*	6	.62 *	.22	.92	.002 †
	HO4	*56*	1.78	*1.18*	5	.79 *	.48	.89	.000 †
Risky	HO5	*56*	1.75	*1.19*	5	.31	-.02	.91	.001 †
OCB	HO6	*56*	1.44	*1.23*	6	1.08 *	2.11 *	.87	.000 †
	HO7	*56*	3.02	*1.45*	5	-.53	-.74	.90	.000 †
	HO8	*56*	1.02	*1.05*	4	.87 *	.07	.84	.000 †
	Scale Value	*56*	2.20	*.81*	3.88	.50	.13	.98	.350

Note. Valid *N* (listwise) = 55. * Statistically significant Skew or Kurtosis (i.e., z-score ± 1.96). † Statistically significant Shapiro-Wilk (i.e., $p \leq .05$).

Linearity was then tested for in SPSS, the results of which illustrated in Table's 2, 3 and 4. Those variables identified as having statistically significant non-linear components (i.e., statistically significant deviation from linearity), and thus likely non-linear relationships, are highlighted. The results of linearity testing in Table 2 indicate that all the relationships involving tenure are non-linear. Likewise, most the tests of linearity indicate that the relationships involving job security as the independent variable are non-linear (see Table 3), and those which are indicated to be linear, are those variable relationships identified above as having statistically significant outliers, and/or statistically significant skew. Also, overall when need for respect was the independent variable; the relationships are non-linear (see Table 4). Bar, three exceptions, one of which was previously identified as having statistically significant outliers. Thus, suggesting that Goodman and Kruskal's gamma and Spearman's

rank-order correlations not be used. Consequently, the test method utilized in this study to test the Hypotheses correlations is: Kendall's Tau-b correlation coefficients, which is a non-parametric correlation test with the single assumption that data is measured at the ordinal, interval or ratio level – as the data in this study is.

Table 2

Linearity Tests for Relationships Between Variables for Hypotheses 1 and 4

Dependent Variables		Independent Variable
		Tenure
Job Security	JS1	$F(17, 39) = .75$, $p = .723$ *
	JS2	$F(17, 39) = .63$, $p = .840$ *
	JS3	$F(17, 39) = .81$, $p = .665$ *
	JS4	$F(17, 39) = .82$, $p = .656$ *
	Scale Value	$F(17, 39) = .59$, $p = .872$ *
Need for Respect	TMC1	$F(16, 38) = .84$, $p = .640$ *
	TMC2	$F(16, 38) = .62$, $p = .848$ *
	TMC3	$F(16, 38) = .70$, $p = .778$ *
	TMC4	$F(16, 38) = 1.30$, $p = .248$ *
	TMC5	$F(16, 38) = .89$, $p = .588$ *
	Scale Value	$F(16, 38) = .85$, $p = .630$ *

Note. * = $p \geq .05$ indicating a non-linear relationship.

Table 3

Linearity Tests for Relationships Between Variables for Hypotheses 2 and 3.

Independent Variables		Dependent Variables				
		Job Security				
		JS1	JS2	JS3	JS4	Scale Value
OCB	OCB1	$F(3, 53) = 2.22$, $p = .118$*	$F(4, 52) = 1.37$, $p = .262$*	$F(4, 52) = .89$, $p = .455$*	$F(3, 53) = 2.63$, $p = .081$*	$F(9, 47) = 1.31$, $p = .262$*
	OCB2	$F(3, 53) = 3.39$, $p = .041$	$F(4, 52) = .59$, $p = .622$*	$F(4, 52) = 2.41$, $p = .077$*	$F(3, 53) = 2.33$, $p = .107$*	$F(9, 47) = .82$, $p = .589$*
	OCB3	$F(3, 53) = 2.53$, $p = .089$*	$F(4, 52) = .80$, $p = .499$*	$F(4, 52) = .73$, $p = .541$*	$F(3, 53) = 1.87$, $p = .165$*	$F(9, 47) = 1.27$, $p = .283$*
	OCB4	$F(3, 53) = 2.71$, $p = .076$*	$F(4, 52) = .88$, $p = .459$*	$F(4, 52) = .22$, $p = .880$*	$F(3, 53) = .70$, $p = .499$*	$F(9, 47) = 1.34$, $p = .003$
	OCB5	$F(3, 53) = 1.33$, $p = .272$*	$F(4, 52) = 1.09$, $p = .363$*	$F(4, 52) = 1.02$, $p = .391$*	$F(3, 53) = 1.35$, $p = .269$*	$F(9, 47) = .40$, $p = .916$*
	OCB6	$F(3, 53) = .23$, $p = .793$*	$F(4, 52) = 1.18$, $p = .325$*	$F(4, 52) = 2.99$, $p = .039$	$F(3, 53) = 2.31$, $p = .110$*	$F(9, 47) = 2.74$, $p = .014$
	Scale Value	$F(3, 53) = 3.31$, $p = .044$	$F(4, 52) = .81$, $p = .496$*	$F(4, 52) = 1.47$, $p = .234$*	$F(3, 53) = 3.10$, $p = .053$*	$F(9, 47) = 1.56$, $p = .162$*

(Continued.)

Table 3 *(Continued.)*

Independent Variables		Dependent Variables				
		Job Security				
		JS1	JS2	JS3	JS4	Scale Value
Risky OCB	HO1	$F(3, 52) = .63$, $p = .536$*	$F(4, 51) = 1.03$, $p = .388$*	$F(4, 51) = 3.22$, $p = .030$	$F(3, 52) = .38$, $p = .684$*	$F(9, 46) = 2.22$, $p = .043$
	HO2	$F(3, 52) = .30$, $p = .740$*	$F(4, 51) = 1.61$, $p = .199$*	$F(4, 51) = 2.26$, $p = .092$*	$F(3, 52) = 1.30$, $p = .282$*	$F(9, 46) = 1.64$, $p = .141$*
	HO3	$F(3, 52) = 2.40$, $p = .101$*	$F(4, 51) = 1.61$, $p = .200$*	$F(4, 51) = 1.29$, $p = .289$*	$F(3, 52) = .48$, $p = .624$*	$F(9, 46) = 1.20$, $p = .323$*
	HO4	$F(3, 52) = 1.06$, $p = .355$*	$F(4, 51) = .81$, $p = .495$*	$F(4, 51) = 1.12$, $p = .350$*	$F(3, 52) = .88$, $p = .419$*	$F(9, 46) = 1.03$, $p = .427$*
	HO5	$F(3, 52) = .47$, $p = .626$*	$F(4, 51) = 1.24$, $p = .305$*	$F(4, 51) = .78$, $p = .512$*	$F(3, 52) = .69$, $p = .504$*	$F(9, 46) = 1.13$, $p = .381$*
	HO6	$F(3, 52) = 1.03$, $p = .363$*	$F(4, 51) = 1.07$, $p = .370$*	$F(4, 51) = 3.19$, $p = .062$*	$F(3, 52) = .45$, $p = .643$*	$F(9, 46) = .87$, $p = .547$*
	HO7	$F(3, 52) = .21$, $p = .810$*	$F(4, 51) = 3.15$, $p = .033$	$F(4, 51) = .67$, $p = .576$*	$F(3, 52) = .14$, $p = .870$*	$F(9, 46) = .82$, $p = .587$*

(Continued.)

Table 3 *(Continued.)*

Independent Variables		Dependent Variables				
		Job Security				
		JS1	JS2	JS3	JS4	Scale Value
Risky OCB	HO8	$F(3, 52) = .13$, $p = .879$*	$F(4, 51) = .16$, $p = .922$*	$F(4, 51) = .19$, $p = .904$*	$F(3, 52) = .04$, $p = .960$*	$F(9, 46) = 1.18$, $p = .333$*
	Scale Value	$F(3, 52) = .82$, $p = .447$*	$F(4, 51) = 1.46$, $p = .236$*	$F(4, 51) = 1.57$, $p = .207$*	$F(3, 52) = .37$, $p = .695$*	$F(9, 46) = 1.14$, $p = .358$*

Note. * = $p \geq .05$ indicating a non-linear relationship.

Table 4

Linearity Tests for Relationships Between Variables for Hypotheses 5 and 6.

Independent Variables		Dependent Variables					
		Need for Respect					
		TMC1	TMC2	TMC3	TMC4	TMC5	Scale Value
OCB	OCB1	$F(3, 52) = .03$, $p = .971$*	$F(3, 52) = .56$, $p = .575$*	$F(3, 53) = .28$, $p = .753$*	$F(3, 53) = .06$, $p = .943$*	$F(3, 53) = .28$, $p = .758$*	$F(13, 43) = 1.12$, $p = .367$*
	OCB2	$F(3, 52) = .64$, $p = .531$*	$F(3, 52) = 1.02$, $p = .368$*	$F(3, 53) = .11$, $p = .897$*	$F(3, 53) = .15$, $p = .858$*	$F(3, 53) = .25$, $p = .777$*	$F(13, 43) = 1.04$, $p = .430$*
	OCB3	$F(3, 52) = .16$, $p = .849$*	$F(3, 52) = .02$, $p = .980$*	$F(3, 53) = 1.70$, $p = .193$*	$F(3, 53) = .70$, $p = .499$*	$F(3, 53) = .64$, $p = .529$*	$F(13, 43) = 1.34$, $p = .234$*
	OCB4	$F(3, 52) = 1.49$, $p = .236$*	$F(3, 52) = 1.01$, $p = .373$*	$F(3, 53) = .36$, $p = .700$*	$F(3, 53) = 1.30$, $p = .282$*	$F(3, 53) = .48$, $p = .623$*	$F(13, 43) = 1.66$, $p = .112$*
	OCB5	$F(3, 52) = .80$, $p = .454$*	$F(3, 52) = .36$, $p = .699$*	$F(3, 53) = .15$, $p = .862$*	$F(3, 53) = .13$, $p = .877$*	$F(3, 53) = .00$, $p = .999$*	$F(13, 43) = 1.56$, $p = .141$*
	OCB6	$F(3, 52) = 1.05$, $p = .356$*	$F(3, 52) = .53$, $p = .786$*	$F(3, 53) = 2.46$, $p = .095$*	$F(3, 53) = .63$, $p = .534$*	$F(3, 53) = 1.30$, $p = .281$*	$F(13, 43) = 1.03$, $p = .443$*
	Scale Value	$F(3, 52) = .77$, $p = .467$*	$F(3, 52) = .69$, $p = .508$*	$F(3, 53) = .08$, $p = .923$*	$F(3, 53) = .38$, $p = .685$*	$F(3, 53) = .14$, $p = .866$*	$F(13, 43) = 1.97$, $p = .052$*

(Continued.)

Table 4 *(Continued.)*

Independent Variables		Dependent Variables					
		Need for Respect					
		TMC1	TMC2	TMC3	TMC4	TMC5	Scale Value
Risky OCB	HO1	$F(3, 51) = .40$, $p = .673$*	$F(3, 51) = .27$, $p = .768$*	$F(3, 52) = .24$, $p = .789$*	$F(3, 52) = 1.28$, $p = .287$*	$F(3, 52) = 1.15$, $p = .326$*	$F(13, 42) = 1.06$, $p = .418$*
	HO2	$F(3, 51) = .70$, $p = .502$*	$F(3, 51) = .22$, $p = .805$*	$F(3, 52) = .28$, $p = .760$*	$F(3, 52) = 2.92$, $p = .063$*	$F(3, 52) = 1.50$, $p = .233$*	$F(13, 42) =.78$, $p = .670$*
	HO3	$F(3, 51) = 2.84$, $p = .068$*	$F(3, 51) = 1.05$, $p = .358$*	$F(3, 52) = 2.37$, $p = .104$*	$F(3, 52) = .50$, $p = .610$*	$F(3, 52) = 2.80$, $p = .070$*	$F(13, 42) =.56$, $p = .858$*
	HO4	$F(3, 51) = .17$, $p = .847$*	$F(3, 51) = .60$, $p = .551$*	$F(3, 52) = 1.95$, $p = .152$*	$F(3, 52) = .78$, $p = .466$*	$F(3, 52) = 1.15$, $p = .325$*	$F(13, 42) =.82$, $p = .633$*
	HO5	$F(3, 51) = 1.05$, $p = .460$*	$F(3, 51) = 1.10$, $p = .341$*	$F(3, 52) = 3.28$, $p = .045$	$F(3, 52) = 2.54$, $p = .088$*	$F(3, 52) = 2.02$, $p = .143$*	$F(13, 42) = 1.10$, $p = .385$*
	HO6	$F(3, 51) = 1.97$, $p = .149$*	$F(3, 51) = 1.37$, $p = .264$*	$F(3, 52) = 1.37$, $p = .264$*	$F(3, 52) = .67$, $p = .516$*	$F(3, 52) = 1.06$, $p = .353$*	$F(13, 42) =.27$, $p = .991$*
	HO7	$F(3, 51) = 1.79$, $p = .120$*	$F(3, 51) = 2.33$, $p = .108$*	$F(3, 52) = 1.82$, $p = .171$*	$F(3, 52) = 3.99$, $p = .025$	$F(3, 52) = 3.19$, $p = .049$	$F(13, 42) = 1.78$, $p = .085$*

(Continued.)

Table 4 *(Continued.)*

Independent Variables		Dependent Variables					
		Need for Respect					
		TMC1	TMC2	TMC3	TMC4	TMC5	Scale Value
Risky OCB	HO8	$F(3, 51) = .35$, $p = .706$*	$F(3, 51) = .24$, $p = .791$*	$F(3, 52) = .67$, $p = .516$*	$F(3, 52) = .03$, $p = .974$*	$F(3, 52) = .95$, $p = .394$*	$F(13, 42) = 1.83$, $p = .075$*
	Scale Value	$F(3, 51) = 1.34$, $p = .271$*	$F(3, 51) = 1.05$, $p = .359$*	$F(3, 52) = 2.30$, $p = .111$*	$F(3, 52) = 1.70$, $p = .193$*	$F(3, 52) = 1.38$, $p = .262$*	$F(13, 42) = .68$, $p = .765$*

Note. * = $p \geq .05$ indicating a non-linear relationship.

3.3 Data Analyses

To examine Hypothesis 1, Kendall's Tau-b correlations coefficients were calculated between job tenure and the responses for each of the items in the Job Security measure, as well as for the overall scale value. The results are shown in Table 1. There were small, but not statistically significant ($\alpha = 0.05$), correlations between job tenure and all the need for Job Security measure items and the overall scale score. These findings do not provide support for Hypothesis 1.

Table 5

Kendall's Tau-b correlations coefficients between job tenure and the Job Security measure's score value and items.

	Tenure	
I do everything I can to ensure that I keep this job.	-.07	*.271*
I help around the workplace to increase my job security.	-.01	*.448*
Doing things beyond what is normally expected of me positively influences my job security.	.01	*.447*
I am certain I can keep this job.	-.10	*.183*
Scale Value	.01	*.475*

Note. Listwise *N* = 57.

To examine Hypotheses 2 and 3, Kendall's Tau-b correlations coefficients were calculated between the responses to the need for Job Security items, as well as the overall measure's mean, and the items in, and scale values of, both helping behaviours measures (i.e., helping OCB, and risky-helping OCB). The correlations are shown in Table 2. In support of Hypothesis 2, the relationships between Job Security responses and OCBs responses are all positive. Additionally, Table 2, shows that all the relationships between OCB responses and the overall measure of Job Security are statistically significant, further supporting Hypothesis 2. Overall, these results suggest that Job Security acts to motivate engagement in helping

Table 6

Kendall's Tau-b correlations coefficients between each of the Job Security measure items, across the type of helping OCBs measure items.

Helping type		Job Security Items				
		JS1	JS2	JS3	JS4	Scale Value
Risky helping OCB Items	I have done something to help another employee which they were not expecting.	-.06	.13	.13	.03	.18
	I have done something to help another employee which I did not immediately tell them about.	-.20*	.00	.02	-.11	.00
	I have had to rush to complete my tasks because of spending time helping another employee.	-.23*	-.03	.04	-.13	-.04
	I have forgotten to do something because of spending time helping another employee	-.19	-.06	-.05	-.04	-.02
	I have attempted to help another employee and realised I didn't have the required knowledge, skills or abilities.	-.27*	-.08	-.02	-.02	-.05
	While helping another employee something unexpected has happened with my job.	-.21*	-.03	-.06	-.02	-.01
	I ask if it is ok before helping another employee.	-.15*	-.06	-.16	-.24*	-.18*
	Doing what I thought would be helpful for another employee turned out to be a safety risk.	-.28*	-.05	-.05	.05	-.06
	Scale Value	-.29**	-.03	-.03	-.09	-.03

(Continued.)

Table 6 (Continued.)

	Helping type	Job Security Items				
		JS1	JS2	JS3	JS4	Scale Value
OCB Items	Take on extra responsibilities in order to help co-workers when things get demanding.	.42***	.30**	.31**	.15	.42***
	Help co-workers with difficult assignments, even when assistance is not directly requested.	.37**	.27**	.27*	.07	.32**
	Assist co-workers with heavy work-loads even though it is not part of my job.	.29**	.23*	.18	-.03	.25*
	Help co-workers who are running behind in their work activities.	.48***	.40***	.27***	.15	.44***
	Help co-workers with work when they have been absent.	.23*	.20*	.09	.08	.21*
	Go out of my way to help co-workers with work-related problems.	.29**	.23*	.18*	.17	.35**
	Scale Value	.44***	.37***	.31**	.14	.45***

Note. Listwise $N = 56$. * $p < 0.05$ level, one-tailed. ** $p < 0.01$ level, one-tailed. ***$p < 0.001$ level, one-tailed.

OCBs. The relationships between Job Security responses and risky helping OCB responses are for the most part weak and not statistically significant, including for the relationships between responses for risky helping OCBs items and the overall measure of Job Security. Thus, support is not found for Hypothesis 3.

To examine Hypothesis 4, Kendall's Tau-b correlations coefficients were calculated between job tenure and the responses for each of the items in the Need for Respect measure, as well as for the overall scale value. The results are shown in Table 7. Small, and not statistically significant ($\alpha = 0.05$), correlations were found between job tenure and the Need for Respect measure items. These findings do not provide support for Hypothesis 4.

Table 7

Kendall's Tau-b correlations coefficients between job tenure and the Need for Respect measure's score value and items.

	Tenure	
I need my co-workers to respect me for my work abilities.	-.07	*.245*
I need my co-workers to respect me for my commitment to my job.	-.06	*.286*
I need my co-workers to respect me for my commitment to working for this organisation.	.04	*.349*
I need my co-workers to respect me for the achievements I attain during work.	-.01	*.464*
I need my co-workers to respect me for my ways of cooperation at work.	-.09	*.191*
Scale Value	-.05	*.325*

Note. Listwise *N* = 56.

To examine Hypotheses 5 and 6, Kendall's Tau-b correlations coefficients were calculated between the responses to the Need for Respect items, as well as the overall measure's score, and the items in, and scale values of, both helping behaviours measures (i.e., helping OCB, and risky-helping OCB). The results of both analyses are shown in Table 8. In support of Hypothesis 5, the relationships between need for respect responses and OCBs

Table 8

Kendall's Tau-b correlations coefficients between each of the Need for Respect measure items, across the type of helping OCBs measure items.

Helping type		Need for Respect Items					
		TMC1	TMC2	TMC3	TMC4	TMC5	Scale Value
Risky helping OCB Items	I have done something to help another employee which they were not expecting.	-.17	-.09	.12	.12	-.03	-.02
	I have done something to help another employee which I did not immediately tell them about.	-.09	-.08	.10	.05	.01	.00
	I have had to rush to complete my tasks because of spending time helping another employee.	-.03	-.12	.04	.17	-.06	.00
	I have forgotten to do something because of spending time helping another employee	-.15	-.25*	-.02	.15	-.14	-.09
	I have attempted to help another employee and realised I didn't have the required knowledge, skills or abilities.	-.11	-.25*	-.08	.06	-.13	-.11
	While helping another employee something unexpected has happened with my job.	-.16	-.26*	.04	.12	-.17	-.08
	I ask if it is ok before helping another employee.	-.16	-.09	-.02	-.05	-.14	-.09

(Continued.)

Table 8 (Continued.)

Helping type		Need for Respect Items					
		TMC1	TMC2	TMC3	TMC4	TMC5	Scale Value
Risky helping	Doing what I thought would be helpful for another employee turned out to be a safety risk.	-.25*	-.33**	-.13	-.08	-.28**	-.19*
OCB Items	Scale Value	-.20*	-.26**	.01	.10	-.17	-.11
OCB Items	Take on extra responsibilities in order to help co-workers when things get demanding.	.22*	.16	.23*	.16	.24*	.20*
	Help co-workers with difficult assignments, even when assistance is not directly requested.	.26*	.24*	.33**	.17	.36**	.29**
	Assist co-workers with heavy work-loads even though it is not part of my job.	.20*	.05	.19	.04	.27*	.14
	Help co-workers who are running behind in their work activities.	.19	.18	.30*	.08	.27*	.19*
	Help co-workers with work when they have been absent.	.04	-.12	.08	.19	.03	.02
	Go out of my way to help co-workers with work-related problems.	.04	-.02	.25*	.22*	.09	.10
	Scale Value	.22*	.10	.27**	.16	.24*	.20*

Note. Listwise $N = 55$. * $p < 0.05$ level, one-tailed. ** $p < 0.01$ level, one-tailed. ***$p < 0.001$ level, one-tailed.

responses are all positive, barring two correlations; that between '*I need my co-workers to respect me for my commitment to my job*' and '*Help co-workers with work when they have been absent*'; and '*I need my co-workers to respect me for my commitment to my job*' and '*Go out of my way to help co-workers with work-related problems*'. Additionally, Table 8, shows that most the relationships between OCB responses and the overall measure of Need for Respect – including the overall measure-overall measure relationship – are statistically significant, further supporting Hypothesis 5. These results suggest that overall Need for Respect acts to motivate engagement in helping OCBs. The relationships between Need for Respect responses and risky helping OCB responses are in both directions, as well as being for the most part weak and not statistically significant. This includes the relationships between responses for risky helping OCBs items and the overall measure of Need for Respect. Thus, support is not found for Hypothesis 6.

4 Discussion

The primary aim of this study was to investigate two relationships proposed by Burt (2015) between potential motivators of new employees helping behaviours; job security and need for respect. This study is amongst the first in examining motivators of safety risky helping in the workplace (e.g. Burt, 2015), and the first to empirically examine these specific motivators of such behaviours. This research examined six hypotheses regarding the proposed relationships (see Section 1.4). Hypotheses 1, 2 and 3 relate to the motivator job security, and Hypotheses 4, 5, and 6 to the motivator need for respect. While support was found for Hypotheses 2 and 5, no support was found for Hypotheses 1, 3, 4, and 6.

4.1 Main Findings and Relationship to the Literature

4.1.1 Job Security Hypotheses

Hypothesis 1 predicted that job tenure would be negatively correlated with job security promoting behaviours. Statistically non-significant, mostly negative, correlations were found in this study between job tenure and responses to the items measuring job security, as well as the overall measures value. Thus, this Hypothesis was not supported, suggesting that at the one-tailed 0.05 significance level the correlations found between current job tenure and job security promoting behaviours are not caused by the hypothesised relationship. Hypothesis 2 predicted that job security would be positively correlated with helping OCBs. Positive correlations were found in this study between responses to the items measuring job security, and the responses to the items measuring helping OCBs. Though not all correlations obtained were statistically significant, those of import – those calculated on the relationship between helping OCBs and the overall measure of Job Security – were. Thus, supporting Hypothesis 2, and suggesting that Job Security, and associated promoting behaviours, motivate engagement in helping OCBs. Hypothesis 3 predicted that job security would be negatively correlated with risky helping behaviours. Negative correlations were found for most of the job security-risky helping responses, though these correlations were for the most part weak and statistically non-significant. Thus, support is not found for Hypothesis 3, suggesting that, for this sample, the correlations identified between these relationships were not directly related to the relationship examined.

The positive relationships found in this study between job security – and associated promoting behaviours – and helping OCBs are consistent with previous research (e.g., King, 2000; Krishnan, Liew, & Koon, 2017), which found significant small-moderate positive relationships between job security and engagement in extra-role behaviours such as helping OCBs. However, these findings, are inconsistent with those of Feather and Rauter (2004) who found both a non-significant relationship, and a small significant negative relationship between these variables. The contradictory findings between this study and that of Feather

and Rauter (2004) can likely be attributed to the following difference between studies; first, that Feather and Rauter (2004) utilized a measure of OCB (Williams & Anderson, 1991) containing both organizational focused OCBs and employee-employee focused OCBs – which was the construct utilized in the current study – and failed to consider this in analysis; and secondly, that as Feather and Rauter (2004) distinguishing between employees based on their contract types they introduced measurement of *objective* job security (Shoss, 2017) into their subjective job security measure – which was the construct utilized in the current study – and failed to examine the error thus generated.

The positive relationships found between the job security and helping OCBs in this study provide partial support to Burt's (2015) proposed theory of new employee helping behaviours, in that job security is positively associated with engagement in helping OCBs. However, the theory can only be partially supported by this study, as causality cannot be established from these findings, and as no other research has yet investigated this causal direction of this relationship. It cannot be assumed that job security, and associated promoting behaviours, motivates employees' engagement in helping OCBs, as it is just as reasonable to assume the reverse; that employees engaging in helping OCBs receive greater attention, and are of greater value to, their organization and consequently the perceive their job as more secure. Furthermore, as extraneous variables (e.g., age, need fulfilment, and employee engagement) have not been controlled for in this study, some caution should be taken when interpreting these findings, and thus also Burt's (2015) theory.

Contrary to the hypotheses, tenure was not negatively related to job security, nor was job security negatively related to risky helping OCBs. Instead, this study found that neither of these relationships were significant, nor did they show evidence of directionality. The non-significant effects found for these relationships could be ascribed to limited power, and as such future research; could use both more participants, and a more reliable measure of risky

helping OCBs. Or failing the latter, future research could develop and evaluate a valid and reliable measure for this construct. Furthermore, as discussed above, future research could measure, and control for, those extraneous variables identified in the literature.

4.1.2 Need for Respect Hypotheses

Hypothesis 4 predicted that job tenure would be positively correlated with need for respect. Statistically non-significant, mostly negative, correlations were found in this study between job tenure and responses to the items measuring need for respect, as well as the overall measures value. Thus, this hypothesis is not supported, suggesting that at the one-tailed 0.05 significance level the correlations found between job tenure and need for respect are caused by random effects or interdependence. Hypothesis 5 predicted that need for respect would be positively correlated with helping OCBs. Mostly positive correlations were found in this study between responses to the items measuring need for respect, and the responses to the items measuring helping OCBs. Though not all correlations obtained were statistically significant, including those of import – those correlations calculated on the relationships between helping OCBs and the overall measure of Need for Respect. Thus, supporting Hypothesis 5, and suggesting that need for respect (or some aspect thereof) motivates engagement in helping OCBs. Hypothesis 6 predicted that need for respect would be positively correlated with risky helping behaviours. However, both positive and negative correlations were found for the need for respect-risky helping relationships, though these correlations were, for the most part, weak and statistically non-significant. Thus, support is not found for Hypothesis 6, suggesting that, for this sample, the correlations identified between these relationships were not directly related to the relationship examined.

This study found negligible-moderate positive relationships – of both statistical significance, and non-significance – between helping OCBs and the overall measure of need

for respect. These findings are consistent with previous research (e.g., Kim & Kim, 2007), which found strong significant positive relationships between discretionary behaviours (i.e., OCBs) and need for respect. The relatively larger, and more consistent, effect effects sizes obtained by Kim and Kim (2007) can be attributed to several methodological differences between these studies, such as; sample population differences (e.g., Korea, versus New Zealand, blue- versus white-collar employment); the construct differences between the two studies' measure of OCBs 'helping OCBs' and 'discretionary behaviours'; and Kim and Kim's (2007) aggregation of need for respect with behavioural commitment.

The significant findings of the current study provide partial support for Burt's (2015) theory on new employee helping behaviours, in that this study's findings support this theory proposed positive relationship between need for respect and engagement in helping OCBs. However, Burt's (2015) can only be partially supported from these findings as causality cannot be established – nor has previous research investigated this – thus, it cannot be assumed that need for respect motivates engagement in helping OCBs to fulfil said need, it is just as reasonable to assume the reverse; that employees engaging in helping OCBs obtain higher levels of respect, and as such their expectations thereof (i.e., their need for respect) will be increased. Additionally, as this study has not controlled for extraneous variables (e.g., organizational identification, and psychological safety), and their potential relationships to those relationships identified in this study, care needs to be taken for inferences from these findings, and as such the inferred partial support provided for this theory.

Again, differing from the hypotheses, tenure was not positively related to need for respect, nor was need for respect positively related to risky helping OCBs. Instead, this study found that neither of these relationships were significant, nor did they show evidence of a directionality. This study's limited power could explain the non-significant effects found for the relationships examining these two hypotheses. Accordingly, future research, should

consider a replication study with a more reliable measure of risky helping OCBs, as well as increasing the participants retained till analysis. Moreover, as discussed above, measuring, and controlling for, potential extraneous variables, identified in the literature to be related to these relationship, is another path for future research.

4.2 Applications and Implications

The present study has several theoretical implications, and practical applications, for both researchers and practitioners, with the purpose of this section being a discussion thereof. The current study examined two motivators (i.e., job security and need for respect) of Burt's (2015) theory on the relationship between motivators of employee helping behaviours, which proposes that; the motivators of employees' engagement in helping OCBs would be mediated by safety risk, and thus motivate disengagement in risky helping OCBs, he further proposed that this model would be mediated by tenure. It was expected that this study would support this theory, however, the study's findings only provide partial support, specifically they support both job security and need for respect as motivators of employees' engagement in helping OCBs, but do not support these motivators having a relationship to either tenure or risky helping OCBs. This suggests that prior to its usage in theoretical and practical research, more research is needed to determine the adequacy of Burt's (2015) model with regards to these two motivators.

Nevertheless, this study's findings significantly contribute towards the pool of research on employee safety, and raise further awareness on the relationship of new employees thereof. Accordingly, this study's findings can be used to increase mindfulness on the topic of new employee safety within the general workforce, and thus encourage employees to both participate in safety research, and to engage in relevant safety management and interventions.

Within New Zealand, this is particularly of import, as recent, and ongoing, safety-related changes (see Section 1.2) are facilitated by research on safety – such as that of this study.

It was expected that the findings of this study could also be used to infer the effect of this study's motivators on organizations, as well as on employees themselves, and as such clarify best practice with regards to relevant safety management and interventions. However, as this study findings were inconclusive with to the effect of the two motivators as relating to safety (i.e., risky helping OCBs) it is impossible to directly infer the effect on employees, and as such made suggestion on safety practices. Likewise, as this study's findings were inconclusive with regards to the effect of tenure on this model, no inferences, such as practical applications thereof, can be made as regarding new employees, or their safety related behaviours.

Still, irrespective of this study's findings, and the motivators of new employees' risky helping OCBs, Burt (2015) suggests that organizations – especially those whose employees' work within industries identified as having high levels of health and safety incidents (e.g., construction, and agriculture) – adopt into their existing policies risk management processes specific to new employees (see pg. 143-157) and helping (see pg. 119-121). For example, organizations could provide training to all their employees in a think before you help process, wherein they are trained to evaluate their helping before considering implementation of any helping behaviours.

4.3 Methodological Strengths and Limitations

This section aims to provide a brief, but comprehensive, discussion as to the methodological strengths and limitations of the current study. Firstly, although a correlational cross-sectional design was the most appropriate study design for the current study, utilizing this design inevitably resulted in a lack of ability to infer causality from those relationships

found to have significant correlations. Second, as the data utilized for this study was archival in nature, the resources necessary for this study were decreased (Shultz, Hofman, & Reiter-Palmon, 2005). Also, as this data did not include those 22 participants removed due to missing data the current study was unable to examine the missing data for patterns such as nonresponse due to method of administration (e.g., Howell, 2010; Van den Broeck, Cunningham, Eeckels, & Herbst, 2005). Furthermore, as this data was collected in a field setting (i.e., from within the workplace), rather than in a laboratory, extraneous variables were not controlled for and replication of this study is made more difficult (Probst, 2004). However, utilization of data collected in the field is appropriate considering the context of this study (i.e., safety) as it ensures it is ethically (i.e., participants' safety is not compromised as part of the study), while maximising ecological validity.

The selection strategy used to collect the archival data utilized in this study was not reported (Shackleton, 2016). However, based upon the described study's procedure, this study infers that a complex sampling strategy was used to gather data; (1) *expert-sampling*, which is a purposive sampling strategy (i.e., organizations and associations of the study were recruited by the researcher); (2) *snowball sampling* (i.e., an individual thereof was directly responsible for participant recruitment); and (3) *self-selection sampling* (i.e., participants self-selected into the study based on advertising). The advantages of this strategy are twofold: it is both practical and economical. However, this strategy also significantly increase both the study's sampling bias, and its overall sampling error (Scheaffer, Mendenhall, Ott, & Gerow, 2012). While, statistical approaches can diminish these limitations (Koziol & Arthur, 2011), this study was unable to use these approaches due to a lack of necessary information on the data sample and the complexities of such an undertaking with regards to instituting these within the type of analysis performed in this study. Consequently, this study's sample is

unlikely to be representative of the population (i.e., New Zealand's workforce), thus, caution should be taken when considering generalizations made from this study.

As discussed above, despite the small sample size (N = 58), this study could conduct analyses of all the study's hypotheses, however, significant – and often small – effects were only obtained for some of the relationships examined. This suggests that the sample size was inadequate for this study to obtain the power necessary to detect significant small effects, but supports the robustness of those relationships identified as significant (Bartlett, Kotrlik, & Higgins, 2001).

The archival data utilized in this study was collected through use of a self-administered (i.e., they were completed by participants in the absence of the researcher) questionnaire – as was most appropriate for the current study's design, and resources (Sedgwick, 2014). Also, as this study was concerned with subjective motivators, this method is appropriate method to assess individual perceptions such as job security (Shoss, 2017). This enabled data to be collected in a relatively economical method, decreased social desirability bias, and ensured that participants data remained anonymous (Mitchell & Jolley, 2010; Podsakoff, MacKenzie, & Podsakoff, 2012). However, the lack of researcher presence may have resulted in idiosyncratic responding.

As discussed above (see Section 2.2) a dual-modal approach was utilized to collect data. The response rate for the former approach was not reported, while the response rates for the latter approach were defined, and reported as ranging between 60-80% (Shackleton, 2016). The literature suggests that the latter is an adequate response rate (Nestor & Schutt, 2014), however, as the response rate for the online questionnaire administrations was not reported its adequacy, and that of the overall study, cannot be examined (Fincham, 2008). Consequently, the current study was unable to analyse the sampling bias generated in this

study due to this approach, or analyse between responders and non-responders to explore any characteristic differences.

Finally, as discussed above (see Section 2.4) the presentation order of the measures utilized in this study was counterbalanced to reduce common method variance. Those measures utilized in this study were determined by the constructs of interest to the study, and selected from the measurement instrument developed by the researchers involved in collection of this study's data (see Shackleton, 2016 Appendix G). As such, though these measures are plausible for use in this study, they are not necessarily the only measures of these constructs available. Consequently, they may not be the most appropriate measure for this study.

4.4 Future Research

Although, this study furthers the existing body of safety literature and practice in its current state, it is hoped that this study also acts as a stepping-stone towards the development of further research. First, those avenues of research identified above (see Section 4.1) and research addressing the limitations of the current study (see Section 4.3) should be conducted. This includes, but is not limited to the following future research suggestions; longitudinal research investigating the causality of the relationship investigated in this study; research with increased statistical power through greater recruitment – and retention – of participants, and the use of a more reliable measure of risky helping OCBs; research developing, and evaluating, a more reliable and valid measure of risky helping OCBs; research measuring, and controlling for, potential extraneous variables (e.g., impulsiveness, enthusiasm, psychological contract, and need satisfaction); replication research utilizing the *complete* archival dataset should examine missing data for patterns; replication research determining which, if any, of the statistical approaches suggested to counteract the effects of complex

sampling strategies are appropriate; and research evaluating the research tools available to collect data on the constructs of the current study – both in of themselves (e.g., construct validity), and against other available research tools (e.g., convergent and discriminant validity).

Second, to address the current study's reliance on self-report data, and associated common method biases (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003), future research, should consider replicating this study with the amendment of a secondary source to obtain objective data on the outcome measures. For example, during data collection have the *primary* participants' co-worker(s) or team supervisor complete a questionnaire on whether they have observed the outcome behaviours being performed.

Third, current findings should be replicated across industries and job types, to examine whether these relationships generalise universally across various work contexts. Furthermore, as the literature (e.g., Kim 1999; Kim & Kim, 2007; Lu & Shih, 1997) supports potential cultural and/or national differences with regards to the constructs in this study, as such future research should examine the generalisability of both these findings and of the measures utilized in this study.

Lastly, more research is needed to determine the adequacy of Burt's (2015) theory, both as relating to the current study's motivators, and to the theory. Consequently, future research, should replicate the current findings and then use regression analysis and structural equation modelling to determine the adequacy of Burt's (2015) theory as it relates to these two motivators. The added benefit of this is the ability to examine whether tenure should remain as a linear construct, or whether a transformation of tenure (i.e., non-linear) would improve data analyses. As well as determining whether Burt's (2015) theory should retain tenure as a mediator construct, rather than a moderator construct, or whether another measure should be used to measure the 'new employees' construct. Furthermore, building upon this future

research should investigate all the potential motivators proposed by Burt (2015), and then use structural equation modelling to assess the overall adequacy of this theory.

4.5 Conclusion

In conclusion, this study finds support for both job security and need for respect as motivators of employee engagement in Organizational Citizenship Behaviours, but not as motivators of Safety Risky Helping Behaviours. Nor does this study find support for the effects of tenure on these relationships. Thus, Burt's (2015) theory on the motivation of new employees helping behaviours is only partially supported. As these findings are for the most part non-significant and thus incongruous with this theory, and as this study is the first to examine these motivators within this context, this suggests that it is necessary for further investigation to be undertaken into these motivators prior to any further consideration with regards to theoretical implications or practical applications. Especially, as this study identified several significant methodological limitations, which were not addressed during this study. Also, as this study is amongst the first to examine Burt's (2015) model of employee-employee helping, future research should build upon, and integrate, this study findings to better ascertain a realistic, and complete, model of said behaviours.

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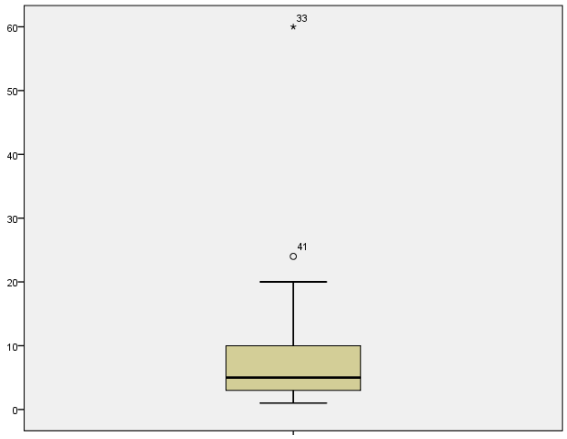
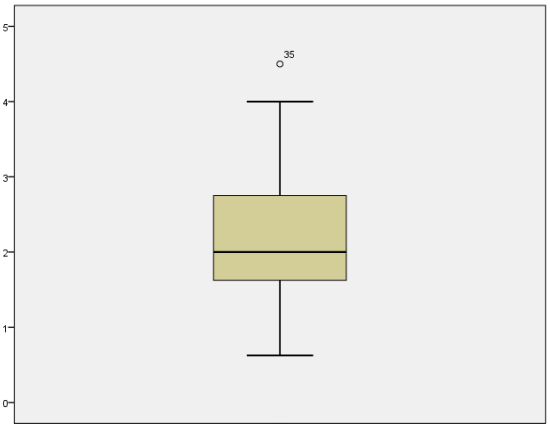
Appendix A

Box plots of items utilized in data analysis.

Tenure



Risky Organizational Citizenship Behaviours



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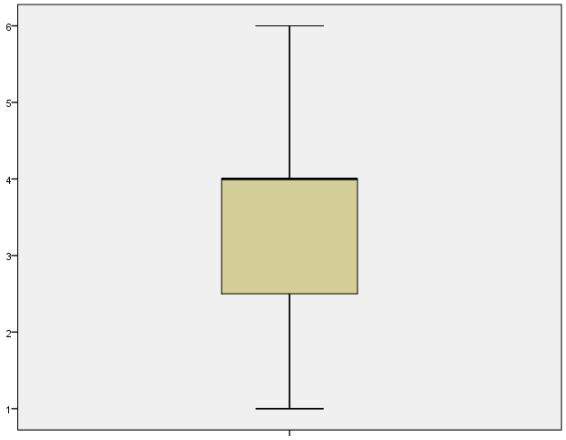
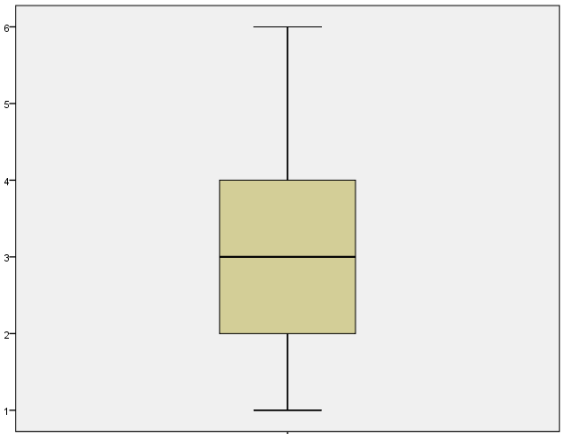
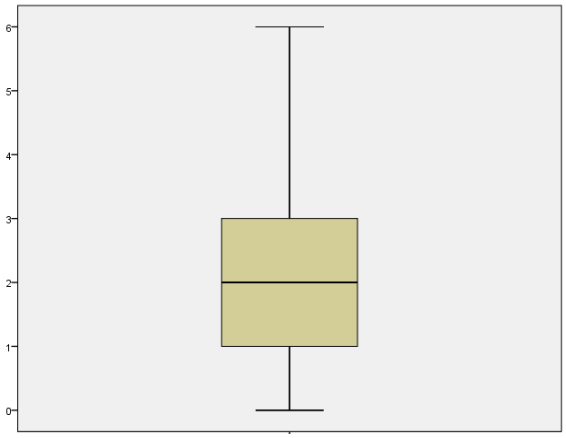


HO1





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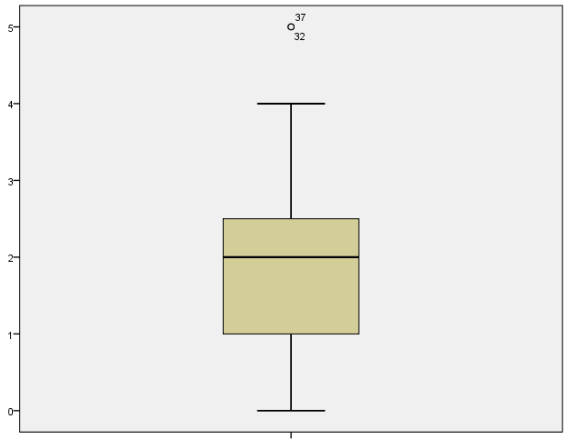

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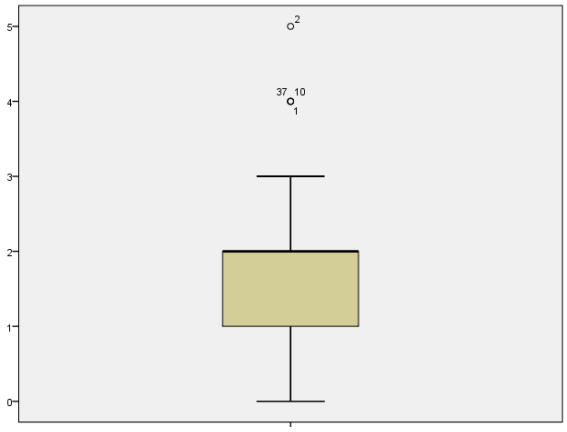

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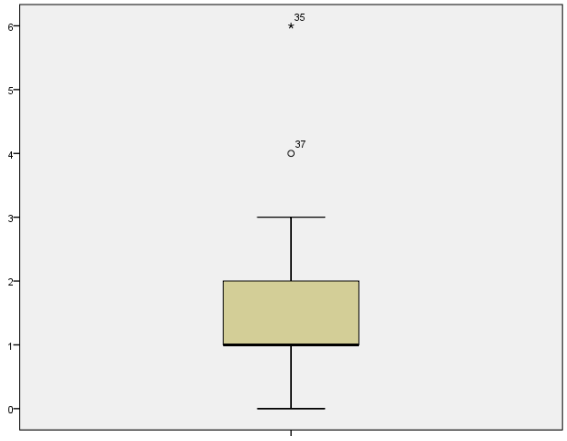

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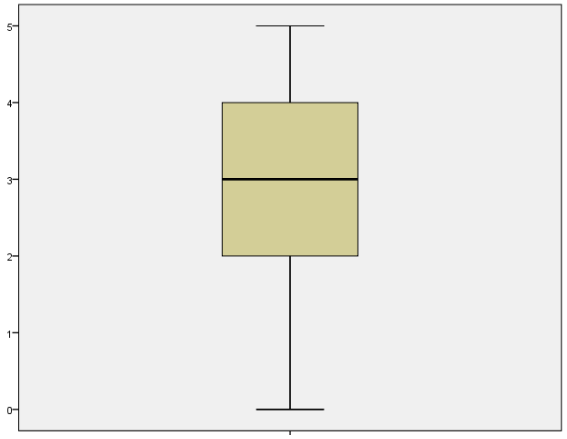
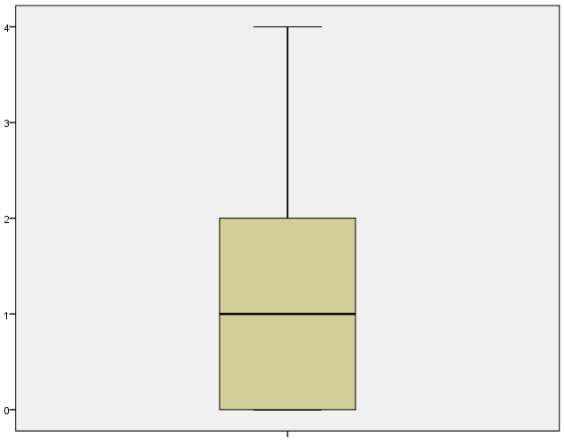


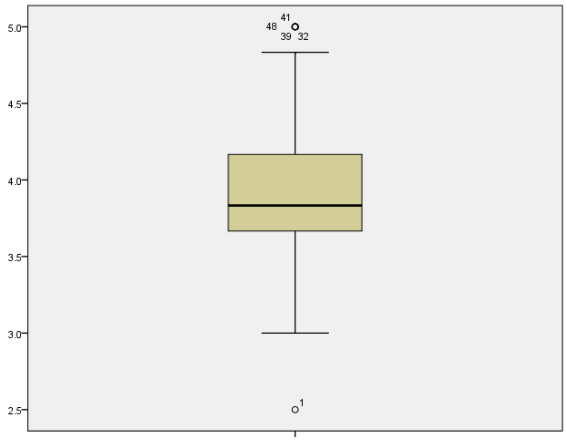
HO6

HO7



HO8

Organizational Citizenship Behaviours



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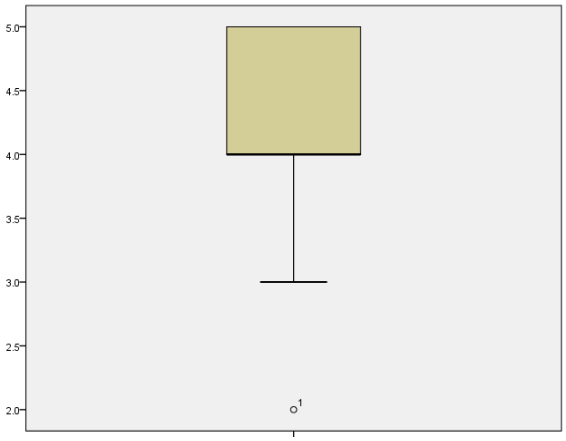

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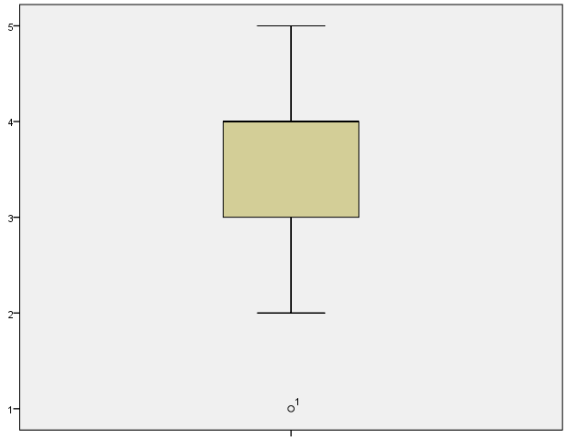

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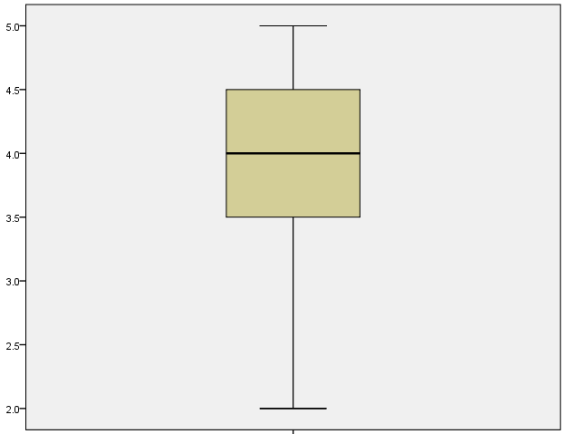

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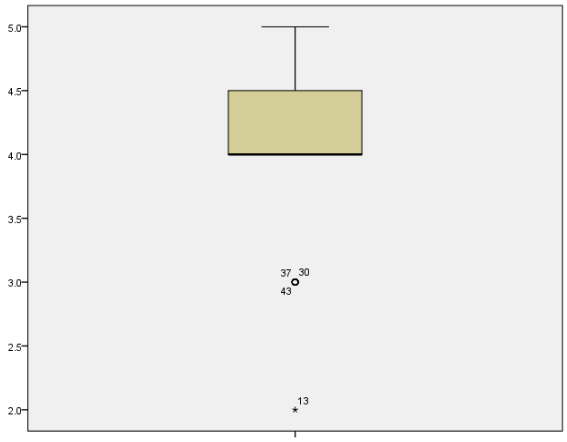

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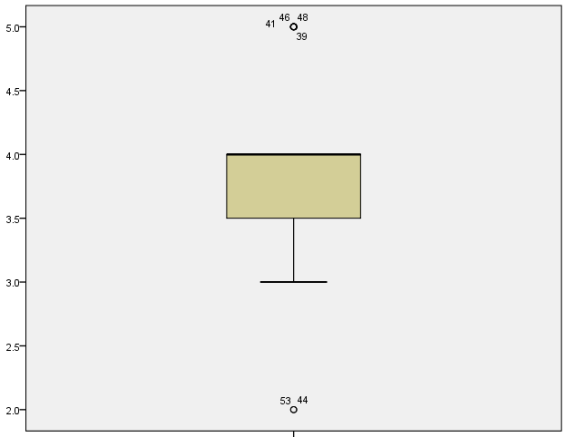

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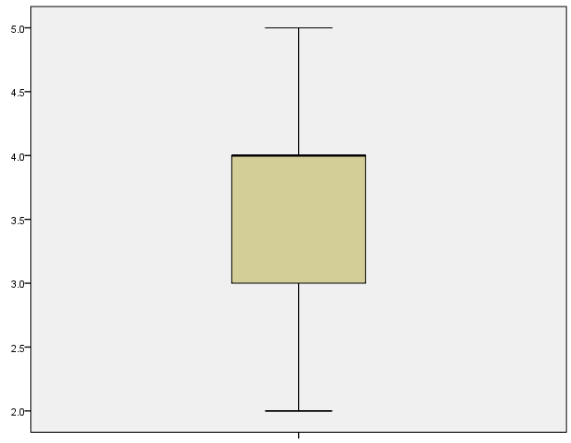
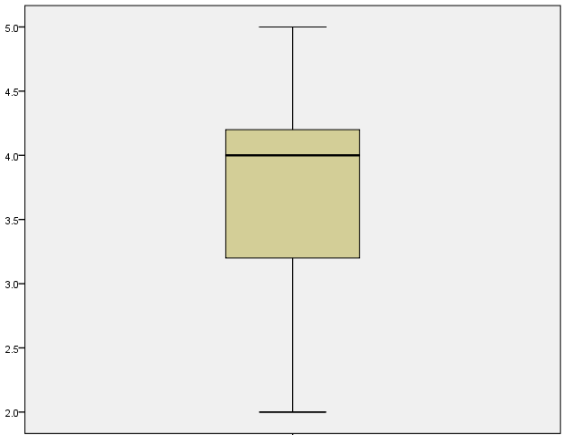


OCB6

Need for Respect



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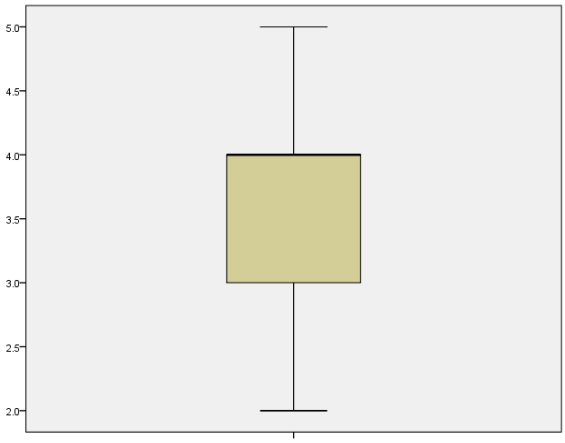
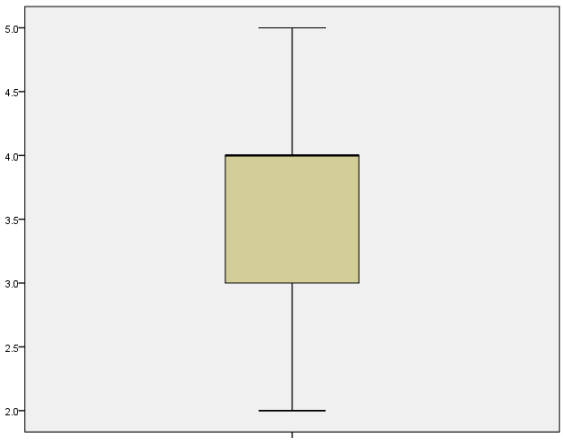
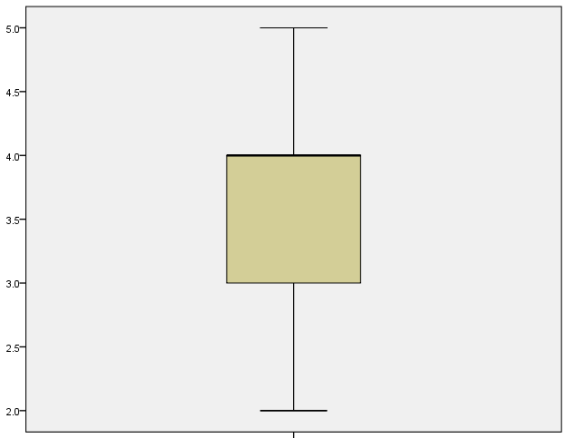


TMC1



TMC2



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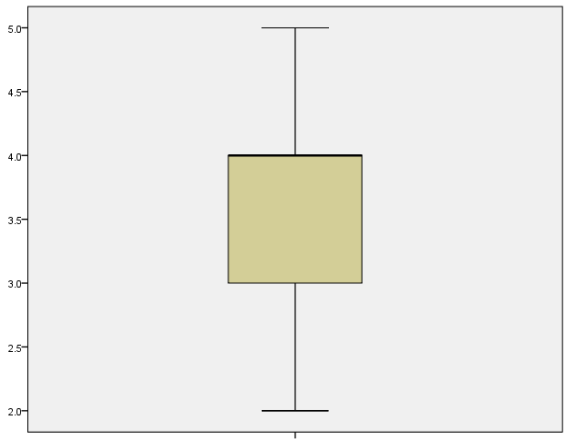

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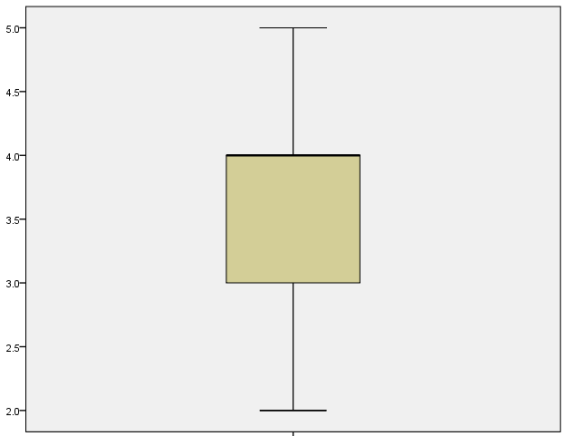
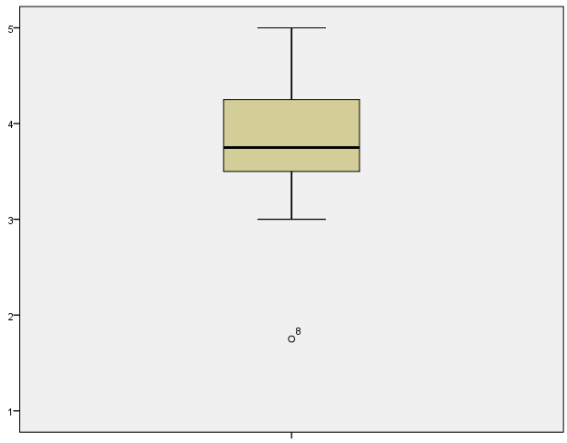


TMC5

Need for Job Security



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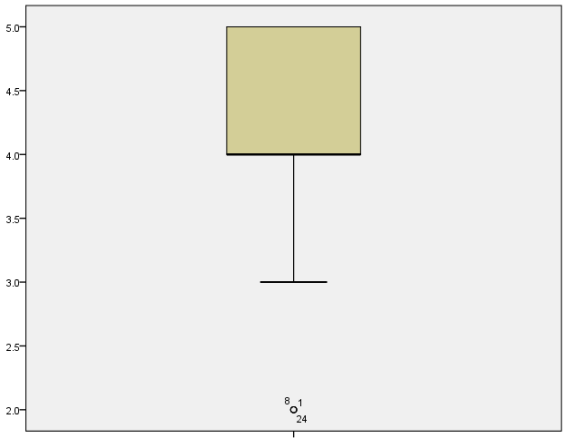

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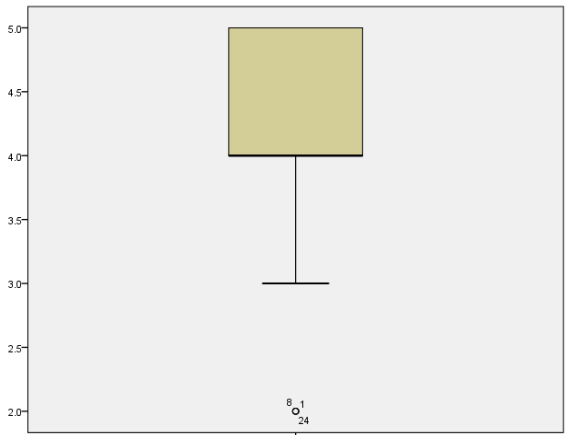

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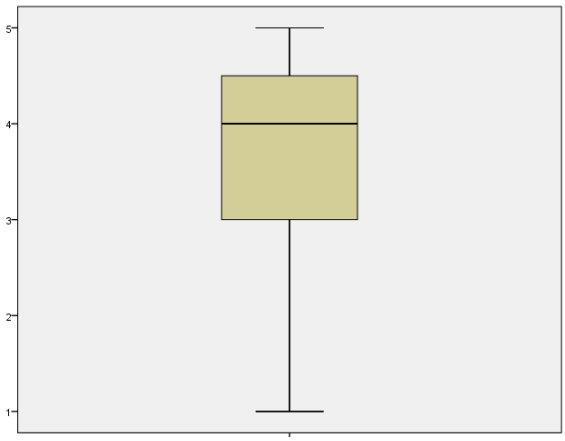

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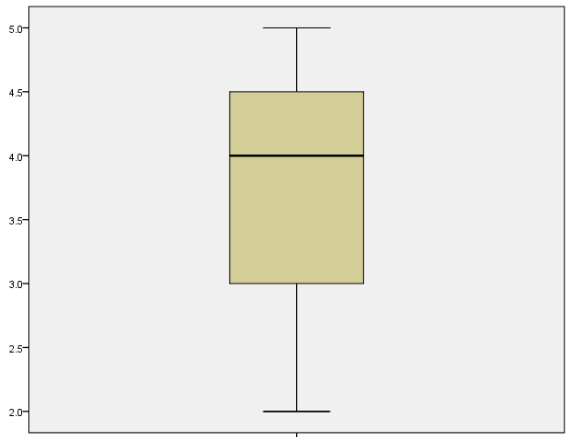

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